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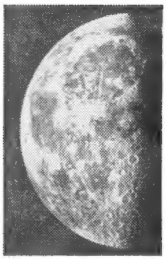
THE DESTROYERS, By Randall Garrett



1. MOON—LAST QUARTER

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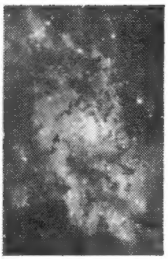
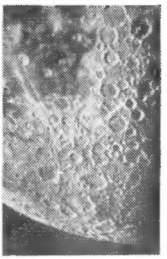


3. SPIRAL NEBULA IN TRIANGULUM

4. GREAT NEBULA IN ANDROMEDA



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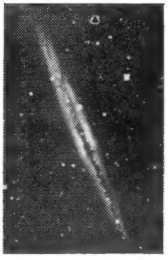

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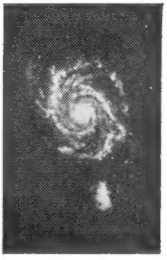

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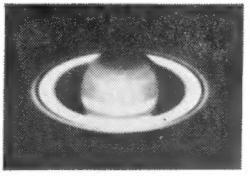

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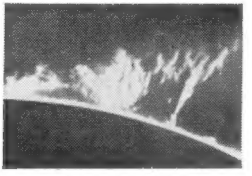

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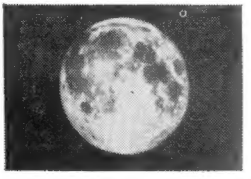

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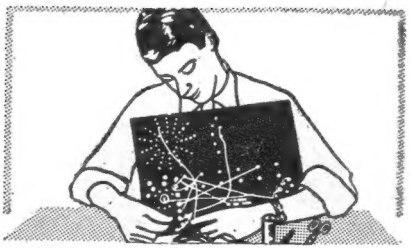

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JOHN W. CAMPBELL, JR.
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COVER BY VAN DONGEN

SYMBOL: Exclusion—or Detention?

Illustrations by
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DECEMBER 1959

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The physicists speak of "electromagnetic" interactions, "strong" and "weak" interactions. The interaction of an atom with a photon of light or a gamma ray is an electromagnetic interaction; the interaction of a billion-volt proton and an atomic nucleus is a typical "strong" interaction. (Actually, at billion-volt energies, the proton doesn't react with the nucleus-as-a-unit, unless it's a hydrogen nucleus, but with one individual nuclear particle, neutron or proton.)

In the "weak" interactions, such phenomena as beta-emission of radioactive nuclei, or the beta-decay that converts a free neutron into a proton and an electron, are typical.

Suppose a single electrical impulse simultaneously did two things: 1. It triggered a mousetrap, and 2. set off a piece of TNT resting on the mousetrap. Question: Would the mousetrap be damaged by the TNT explosion, or would it throw the TNT far enough away so that no damage occurred?

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trap; the mousetrap doesn't have a chance of tossing the TNT away in time.

The weak-interaction forces were recognized relatively recently, because in most of the experimental "atom smashing" experiments, while weak-interactions were excited, they never had time enough to do anything detectable before the strong interaction forces had disrupted the whole system.

For almost one hundred fifty years now, nearly the entire interest of physics has been directed toward the study of what are, in fact, electromagnetic interactions, plus, in the last fifty years, the interest in nuclear forces, the strong interactions.

Before that time—in the Seventeenth and Eighteenth centuries—most work had been done on fundamental mechanics, not mechanical engineering, but what we can best think of as celestial mechanics: Newton's Laws of Motion, inertia, gravity, momentum, kinetic energy.

For one hundred fifty years, there has been almost no perceptible progress in human understanding of these forces of celestial mechanics. It's true that Einstein's work on Relativity did make some alterations in our understandings—but the practical results of Einstein's work remain at the microcosmic, rather than the macrocosmic end. $E=mc^2$ means atomic energy to almost everyone.

I think there's a reason. When men start developing an area, whether it be a geographic area or an intellectual area, it's natural that they'll start working on the most easily tapped, highest-yield sections. The sectors that can be tapped with the greatest, most immediate reward, with the least investment of effort.

That is, of course, a perfectly rational thing to do—within limits. But it is also true that, normally, the greatest rewards, ultimately come to those who do trouble to invest in a long-term effort. Picking the "jewelry ore" out of a mine and then abandoning it for another "jewelry ore" deposit does yield high returns for low investment. But the real tonnage yields come from the long-term, lower-concentration mining operations.

Electrical, magnetic, and electromagnetic forces are the basis of our present technology. They are the first of the two classes of strong-interactions. Nuclear forces are about one hundred times as intense as the electromagnetic forces; we're just beginning on them. We reached them by using our already-developed electric, magnetic, and electromagnetic forces. A cyclotron uses electric power to develop a magnetic field in which the particles are accelerated by the use of radio-frequency oscillations. The modern linear accelerators use microwave cavity resonators and waveguides; the particle is accelerated down the electrostatic slope of the radio wave like a surf-board rider, practically.

Now there is a curious situation; many things simply cannot be accomplished by the use of powerful tools. You have to use weak ones.

Nuclear energy simply isn't suitable as a tool for delicately selective chemical synthesis. A construction company's powerful pneumatic rock-drilling equipment just won't serve a dentist's needs. There are times when sheer power isn't useful, but destructive. There are jobs that can *never* be done, if you have only powerful tools.

Any biochemist will assure you of that. A mixture of hot nitric and sulfuric acids will take practically any living tissue into solution all right . . . it's a powerful tool. But you can't learn much beyond the elemental constitution of the tissue that way.

The strong-interaction forces, because they are high-intensity, sharply localized forces, constitute a sort of "jewelry ore" for physicists to mine. Big returns quick and easy.

Meanwhile . . . celestial mechanics has been neglected almost completely. And the forces of that level aren't merely "weak interactions"—they're "ultrafeeble interactions"! The low-intensity electric forces of chemical reactions are pretty feeble, by comparison with nuclear forces . . . but think of the ultrafeeble gravitational force between two hydrogen atoms!

Of course, it is true that those ultrafeeble interactions do have the unique characteristic of being additive in a way that none of the strong interactions are. The electric interactions of protons and electrons are so strong that they group in a way that cancels the effects so far as the rest of the universe is concerned. The quintillions of atoms in a grain of sand don't add their charges; the strong forces present simply cancel out.

But the ultrafeeble forces of gravity summate instead of canceling. By reason of that long-term, long-range summation, the final effect achieved at the heart of a star is a force-intensity so immense that not even the strongest of the strong-interactions can resist it.

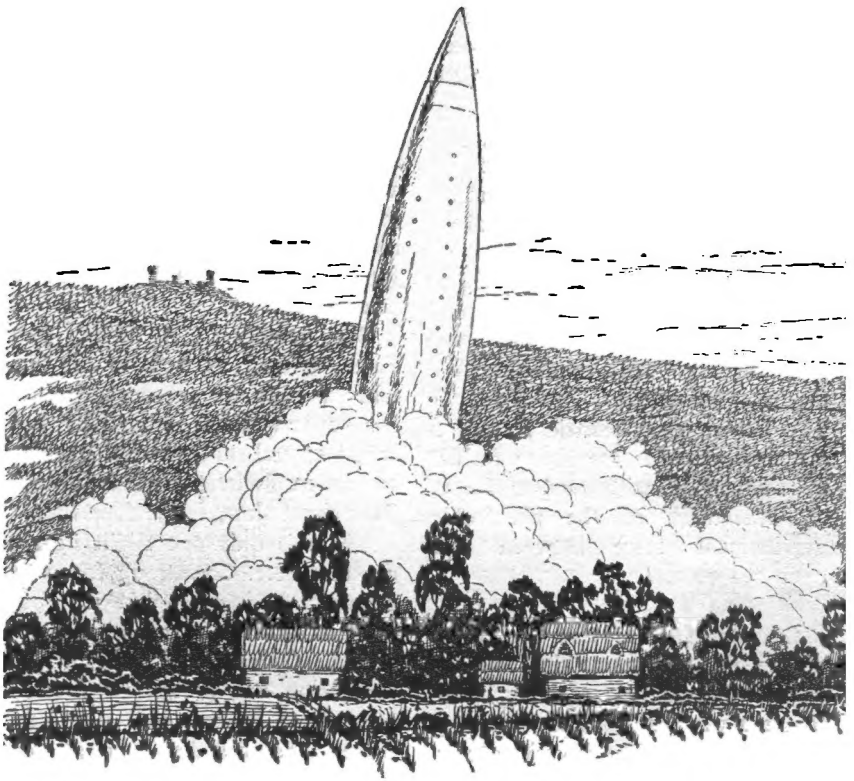
It is an ultrafeeble force, because it takes so long to do anything. The weakest of the weak-interaction type forces is astonishing to the particle physicist because it takes not only seconds, but even whole minutes to accomplish something! A neutron remains stable for about eighteen minutes before the weak-interaction forces at work finally succeed in cracking it.

But gravity . . .! Why, even Earth, as near as it is to the Sun, takes a year to get around! And comets can retire from the Sun, spend several million years traveling an immensely long orbit, and return! Talk about slow, feeble forces!

There is only one slight item to consider here. The strong forces are certainly fascinating—but it's those ultrafeeble forces that have us Earth-bound. Gravity and inertia. Not electromagnetic or nuclear forces—just those pokey old ultrafeeble forces. The ones that nobody's been interested enough in to do any real

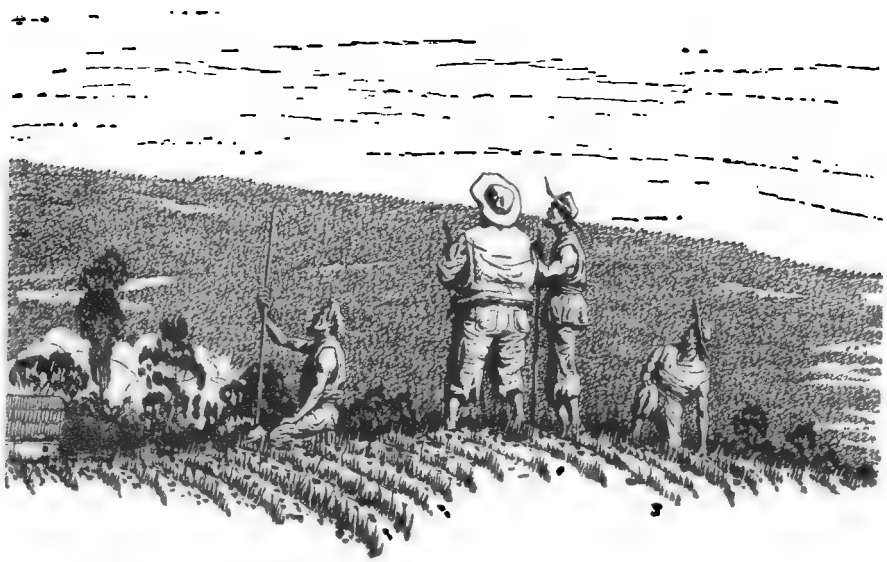
(*Continued on page* 158)

THE DESTROYERS



BY RANDALL GARRETT

Any war is made up of a horde of personal tragedies—but the greater picture is the tragedy of the death of a way of life. For a way of life — good, bad, or indifferent — exists because it is dearly loved ...



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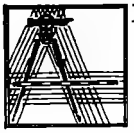


NKETAM stretched his arms out as though he were trying to embrace the whole world. He pushed himself up on his tiptoes, arched his back, and gave out with a prodigious yawn that somehow managed to express all the contentment and pleasure that filled his soul. He felt a faint twinge in his shoulders, and there was a dull ache in the small of his back, both of which reminded him that he was no longer the man he had been twenty years before, but he ignored them and stretched again.

He was still strong, Anketam thought; still strong enough to do his day's work for The Chief without being too tired to relax and enjoy himself afterwards. At forty-five, he had a good fifteen years more before he'd be retired to minor make-work jobs, doing the small chores as a a sort of token in justification of his keep in his old age.

He settled his heels back to the ground and looked around at the fields of green shoots that surrounded him. That part of the job was done, at least. The sun's lower edge was just barely touching the western horizon, and all the seedlings were in. Anketam had kept his crew sweating to get them all in, but now the greenhouses were all empty and ready for seeding in the next crop while this one grew to maturity. But that could wait. By working just a little harder, for just a little longer each day, he and his crew had managed to get the transplanting done a good four days ahead of schedule, which meant four days of fishing or hunting or just plain loafing. The Chief didn't care how a man spent his time, so long as the work was done.

He thumbed his broad-brimmed hat back from his forehead and looked up at the sky. There were a few thin clouds overhead, but there was no threat of rain, which was good. In this part of Xedii, the spring rains sometimes hit hard and washed out the transplanted seedlings before they had a chance to take root properly. If rain would hold off for another ten days, Anketam thought, then it could fall all it wanted. Meanwhile, the irrigation reservoir was full to brimming, and that would supply all the water the young shoots needed to keep them from being burnt by the sun.

He lowered his eyes again, this time to look at the next section over toward the south, where Jacovik and his crew were still working. He could see their bent figures outlined against the horizon, just at the brow of the slope, and he grinned to himself. He had beaten Jacovik out again.

Anketam and Jacovik had had a friendly feud going for years, each trying to do a better, faster job than the other. None of the other supervisors on The Chief's land came even close to beating out Anketam or Jacovik, so it was always between the two of them, which one came out on top. Sometimes it was one, sometimes the other.

At the last harvest, Jacovik had

been very pleased with himself when the tallies showed that he'd beaten out Anketam by a hundred kilos of cut leaves. But The Chief had taken him down a good bit when the report came through that Anketam's leaves had made more money because they were better quality.

He looked all around the horizon. From here, only Jacovik's section could be seen, and only Jacovik's men could be seen moving.

When Anketam's gaze touched the northern horizon, his gray eyes narrowed a little. There was a darkness there, a faint indication of cloud build-up. He hoped it didn't mean rain. Getting the transplants in early was all right, but it didn't count for anything if they were washed out.

He pushed the thought out of his mind. Rain or no rain, there was nothing could be done about it except put up shelters over the rows of plants. He'd just have to keep an eye on the northern horizon and hope for the best. He didn't want to put up the shelters unless he absolutely had to, because the seedlings were invariably bruised in the process and that would cut the leaf yield 'way down. He remembered one year when Jacovik had gotten panicky and put up his shelters, and the storm had been a gentle thing that only lasted a few minutes before it blew over. Anketam had held off, ready to make his men work in the rain if necessary, and when the harvest had come, he'd beaten Jacovik hands down.

Anketam pulled his hat down again and turned to walk toward his house in the little village that he and his crew called home. He had warned his wife to have supper ready early. "I figure on being finished by sundown," he'd said. "You can tell the other women I said so. But don't say anything to them till after we've gone to the fields. I don't want those boys thinking about the fishing they're going to do tomorrow and then get behind in their work because they're daydreaming."

The other men were already gone; they'd headed back to the village as fast as they could move as soon as he'd told them the job was finished. Only he had stayed to look at the fields and see them all finished, each shoot casting long shadows in the ruddy light of the setting sun. He'd wanted to stand there, all by himself feeling the glow of pride and satisfaction that came over him, knowing that he was better than any other supervisor on The Chief's vast acreage.

His own shadow grew long ahead of him as he walked back, his steps still brisk and springy, in spite of the day's hard work.

The sun had set and twilight had come by the time he reached his own home. He had glanced again toward the north, and had been relieved to see that the stars were visible near the horizon. The clouds couldn't be very thick.

Overhead, the great, glowing cloud of the Dragon Nebula shed its soft light. That's what made it possible to work after sundown in the spring;

at that time of year, the Dragon Nebula was at its brightest during the early part of the evening. The tail of it didn't vanish beneath the horizon until well after midnight. In the autumn, it wasn't visible at all, and the nights were dark except for the stars.

Anketam pushed open the door of his home and noted with satisfaction that the warm smells of cooking filled the air, laving his nostrils and palate with fine promises. He stopped and frowned as he heard a man's voice speaking in low tones in the kitchen.

Then Memi's voice called out: "Is that you, Ank?"

"Yeah," he said, walking toward the kitchen. "It's me."

"We've got company," she said. "Guess who."

"I don't claim to be much good at guessing," said Anketam. "I'll have to peek."

He stopped at the door of the kitchen and grinned widely when he saw who the man was. "Russat! Well, by heaven, it's good to see you!"

There was a moment's hesitation, then a minute or two of handshaking and backslapping as the two brothers both tried to speak at the same time. Anketam heard himself repeating: "Yessir! By *heaven,* it's good to see you! Real good!"

And Russat was saying: "Same here, Ank! And, gee, you're looking great. I mean, real great! Tough as ever, eh, Ank?"

"Yeah, sure, tough as ever. Sit down, boy. Memi! Pour us something hot and get that bottle out of the cupboard!"

Anketam pushed his brother back towards the chair and made him sit down, but Russat was protesting: "Now, wait a minute! Now, just you hold on, Ank! Don't be getting out your bottle just yet. I brought some *real* stuff! I mean, *expensive*—stuff you can't get very easy. I brought it just for you, and you're going to have some of it before you say another word. Show him, Memi."

Memi was standing there, beaming, holding the bottle. Her blue eyes had faded slowly in the years since she and Anketam had married, but there was a sparkle in them now. Anketam looked at the bottle.

"Bedamned," he said softly. The bottle was beautiful just as it was. It was a work of art in itself, with designs cut all through it and pretty tracings of what looked like gold thread laced in and out of the surface. And it was full to the neck with a clear, red-brown liquid. Anketam thought of the bottle in his own cupboard—plain, translucent plastic, filled with the water-white liquor rationed out from the commissary—and he suddenly felt very backwards and countryish. He scratched thoughtfully at his beard and said: "Well, Well. I don't know, Russ—I don't know. You think a plain farmer like me can take anything that fancy?"

Russat laughed, a little embarrassed. "Sure you can. You mean to say you've never had brandy before? Why, down in Algia, our Chief—" He stopped.

Anketam didn't look at him. "Sure, Russ; sure. I'll bet Chief Samas gives a drink to his secretary, too, now and then." He turned around and winked. "But this stuff is for brain work, not farming."

He knew Russat was embarrassed. The boy was nearly ten years younger than Anketam, but Anketam knew that his younger brother had more brains and ability, as far as paper work went, than he, himself, would ever have. The boy (Anketam reminded himself that he shouldn't think of Russat as a boy—after all, he was thirty-six now) had worked as a special secretary for one of the important chiefs in Algia for five years now. Anketam noticed, without criticism, that Russat had grown soft with the years. His skin was almost pink, bleached from years of indoor work, and looked pale and sickly, even beside Memi's sun-browned skin—and Memi hadn't been out in the sun as much as her husband had.

Anketam reached out and took the bottle carefully from his wife's hands. Her eyes watched him searchingly; she had been aware of the subtleties of the exchange between her rough, hard-working, farmer husband and his younger, brighter, better-educated brother.

Anketam said: "If this is a present, I guess I'd better open it." He peeled off the seal, then carefully removed the glass stopper and sniffed at the open mouth of the beautiful bottle. "Hm-m-m! Say!" Then he set the bottle down carefully on the table. "You're the guest, Russ, so you can pour. That tea ready yet, Memi?"

"Coming right up," said his wife gratefully. "Coming right up."

Anketam watched Russat carefully pour brandy into the cups of hot, spicy tea that Memi set before them. Then he looked up, grinned at his wife, and said: "Pour yourself a cup, honey. This is an occasion. A big occasion."

She nodded quickly, very pleased, and went over to get another cup.

"What brings you up here, Russ?" Anketam asked. "I hope you didn't just decide to pick up a bottle of your Chief's brandy and then take off." He chuckled after he said it, but he was more serious than he let on. He actually worried about Russat at times. The boy might just take it in his head to do something silly.

Russat laughed and shook his head. "No, no. I'm not crazy, and I'm not stupid—at least, I think not. No; I got to go up to Chromdin. My Chief is sending word that he's ready to supply goods for the war."

Anketam frowned. He'd heard that there might be war, of course. There had been all kinds of rumors about how some of the Chiefs were all for fighting, but Anketam didn't pay much attention to these rumors. In the first place, he knew that it was none of his business; in the second place, he didn't think there would be any war. Why should anyone pick on Xedii?

What war would mean if it did come, Anketam had no idea, but he didn't think the Chiefs would get into

a war they couldn't finish. And, he repeated to himself, he didn't believe there would be a war.

He said as much to Russat.

His brother looked up at him in surprise. "You mean you haven't heard?"

"Heard what?"

"Why, the war's already started. Sure. Five, six days ago. We're at war, Ank."

Anketam's frown grew deeper. He knew that there were other planets besides Xedii; he had heard that some of the stars in the sky were planets and suns. He didn't really understand how that could be, but even The Chief had said it was true, so Anketam accepted it as he did the truth about God. It was so, and that was enough for Anketam. Why should he bother himself with other people's business?

But—*war?*

Why?

"How'd it happen?" he asked.

Russat sipped at his hot drink before answering. Behind him, Memi moved slowly around the cooker, pretending to be finishing the meal, pretending not to be listening.

"Well, I don't have all the information," Russat said, pinching his little short beard between thumb and forefinger. "But I do know that the Chiefs didn't want the embassy in Chromdin."

"No," said Anketam. "I suppose not."

"I understand they have been making all kinds of threats," Russat said. "Trying to tell everybody what to do. They think they run all of Creation, I guess. Anyway, they were told to pull out right after the last harvest. They refused to do it, and for a while nobody did anything. Then, last week, the President ordered the Army to throw 'em out—bag and baggage. There was some fighting, I understand, but they got out finally. Now they've said they're going to smash us." He grinned.

Anketam said: "What's so funny?"

"Oh, they won't do anything," said Russat. "They fume and fuss a lot, but they won't do anything."

"I hope not," said Anketam. He finished the last of his spiked tea, and Memi poured him another one. "I don't see how they have any right to tell us how to live or how to run our own homes. They ought to mind their own business and leave us alone."

"You two finish those drinks," said Memi, "and quit talking about wars. The food will be ready pretty quickly."

"Good," said Anketam, "I'm starved." And, he admitted to himself, the brandy and hot tea had gone to his head. A good meal would make him feel better.

Russat said: "I don't get much of a chance to eat Memi's cooking; I'll sure like this meal."

"You can stay for breakfast in the morning, can't you?" Anketam asked.

"Oh, I wouldn't want to put you to all that trouble. I have to be up to your Chief's house before sunrise."

"We get up before sunrise," Anketam said flatly. "You can stay for breakfast."

II

The spring planting did well. The rains didn't come until after the seedlings had taken root and anchored themselves well into the soil, and the rows showed no signs of heavy bruising. Anketam had been watching one section in particular, where young Basom had planted. Basom had a tendency to do a sloppy job, and if it had showed up as bruised or poorly planted seedlings, Anketam would have seen to it that Basom got what was coming to him.

But the section looked as good as anyone else's, so Anketam said nothing to Basom.

Russat had come back after twenty days and reported that there was an awful lot of fuss in Chromdin, but nothing was really developing. Then he had gone on back home.

As spring became summer, Anketam pushed the war out of his mind. Evidently, there wasn't going to be any real shooting. Except that two of The Chief's sons had gone off to join the Army, things remained the same as always. Life went on as it had.

The summer was hot and almost windless. Work became all but impossible, except during the early morning and late afternoon. Fortunately, there wasn't much that had to be done. At this stage of their growth, the plants pretty much took care of themselves.

Anketam spent most of his time fishing. He and Jacovik and some of the others would go down to the river and sit under the shade trees, out of the sun, and dangle their lines in the water. It really didn't matter if they caught much or not; the purpose of fishing was to loaf and get away from the heat, not to catch fish. Even so, they always managed to bring home enough for a good meal at the end of the day.

The day that the war intruded on Anketam's consciousness again had started off just like any other day. Anketam got his fishing gear together, including a lunch that Memi had packed for him, and gone over to pick up Blejjo.

Blejjo was the oldest man in the village. Some said he was over a hundred, but Blejjo himself only admitted to eighty. He'd been retired a long time back, and his only duties now were little odd jobs that were easy enough, even for an old man. Not that there was anything feeble about old Blejjo; he still looked and acted spry enough.

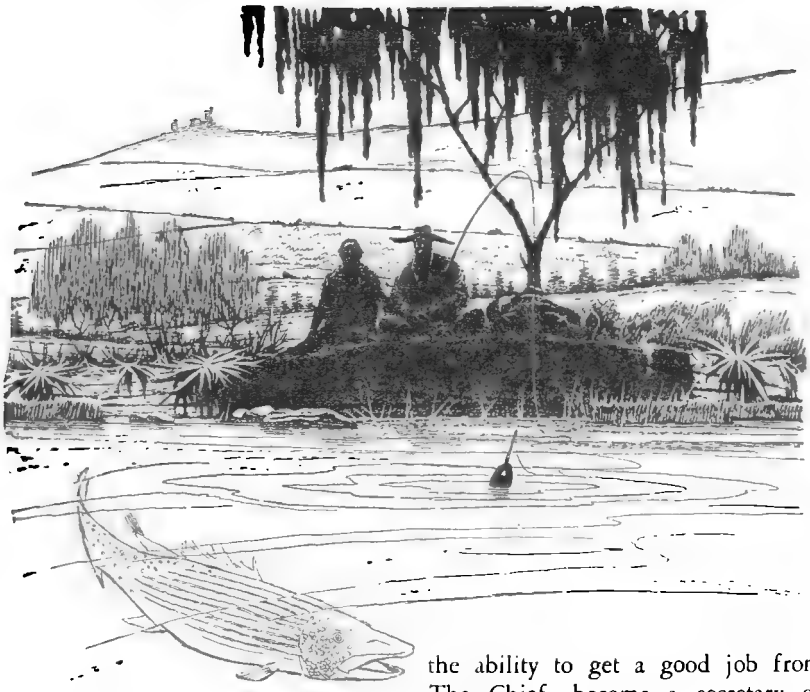
He was sitting on his front porch, talking to young Basom, when Anketam came up.

The old man grinned. "Hello, Ank. You figure on getting a few more fish today?"

"Why not? The river's full of 'em. Come along."

"Don't see why not," said Blejjo. "What do you think, Basom?"

The younger man smiled and



shook his head. "I'll stay around home, I think. I'm too lazy today to go to all that effort."

"Too lazy to loaf," said Blejjo, laughing. "That's as lazy as I ever heard."

Anketam smiled, but he didn't say anything. Basom *was* lazy, but Anketam never mentioned it unless the boy didn't get his work done. Leave that sort of kidding up to the others; it wasn't good for a supervisor to ride his men unless it was necessary for discipline.

Basom was a powerful young man, tall and well-proportioned. If the truth were known, he probably had the ability to get a good job from The Chief—become a secretary or something, like Russat. But he was sloppy in his work, and, as Blejjo had said, lazy. His saving grace was the fact that he took things as they came; he never showed any resentment towards Anketam if he was rebuked for not doing his work well, and he honestly tried to do better—for a while, at least.

"Not too lazy to loaf," Basom said in self-defense. "Just too lazy to walk four miles to loaf when I can do it here."

Old Blejjo was taking his fishing gear down from the rack on the porch. Without looking around, he said: "Cooler down by the river."

"By the time I walked there," said

Basom philosophically, "walking through all that sun, I'd be so hot it would take me two hours to cool down to where I am now, and another two hours to cool down any more. That's four hours wasted. Now—" He looked at Anketam with a sly grin. "Now, if you two wanted to carry me, I'd be much obliged. Anketam, you could carry me piggyback, while Blejjo goes over to fetch my pole. If you'd do that, I believe I could see my way clear to going fishing with you."

Anketam shook his head positively. "I'm afraid the sun would do you in, anyway."

"Maybe you'd like The Chief to carry you," said Blejjo. There was a bite in his voice.

"Now, wait," Basom said apprehensively, "I didn't say anything lik that. I didn't mean it that way."

Blejjo pointed his fishing pole at the youth. "You ought to be thankful you've got Anketam for a supervisor. There's some supers who'd boot you good for a crack like that."

Basom cast appealing eyes at Anketam. "I *am* thankful! You know I am! Why, you're the best super in the barony! Everybody knows that. I was only kidding. You know that."

Before Anketam could say anything, the old man said: "You can bet your life that no other super in this barony would put up with your laziness!"

"Now, Blejjo," said Anketam, "leave the boy alone. He meant no harm. If he needs talking to, I'll do the talking."

Basom looked gratefully reprieved.

"Sorry, Ank," said Blejjo. "It's just that some of these young people have no respect for their elders." He looked at Basom and smiled. "Didn't mean to take it out on you, Bas. There's a lot worse than you." Then, changing his tone: "Sure you don't want to come with us?"

Basom looked apologetic, but he stuck to his guns. "No. Thanks again, but—" He grinned self-consciously. "To be honest, I was thinking of going over to see Zillia. Her dad said I could come."

Anketam grinned at the boy. "Well, now, that's an excuse I'll accept. Come on, Blejjo, this is not a sport for old men like us. Fishing is more our speed."

Chuckling, Blejjo shouldered his fishing pole, and the two men started down the dusty village street toward the road that led to the river.

They walked in silence for a while, trying to ignore the glaring sun that brought the sweat out on their skins, soaking the sweatbands of their broad-brimmed hats and running in little rivulets down their bodies.

"I kind of feel sorry for that boy," old Blejjo said at last.

"Oh?" said Anketam. "How so? He'll get along. He's improving. Why, he did as good a job of transplanting as any man this spring. Last year, he bruised the seedlings, but I gave him a good dressing down and he remembered it. He'll be all right."

"I'm not talking about that, Ank,"

said the old man. "I mean him and Zillia. He's really got a case on with that girl."

"Anything wrong with that? A young fellow's got a right to fall in love, hasn't he? And Zillia seems pretty keen on him, too. If her father doesn't object, everything ought to go along pretty smoothly."

"Her father might not object," said Blejjo, looking down at his feet as they paced off the dusty road. "But there's others who might object."

"Who, for instance?"

Blejjo was silent for several steps. Then he said: "Well, Kevenoe, for one."

Anketam thought that over in silence. Kevenoe was on The Chief's staff at the castle. Like many staff men —including, Anketam thought wryly, his own brother Russat, on occasion —he tended to lord it over the farmers who worked the land. "Kevenoe has an eye on Zillia?" he asked after a moment.

"I understand he's asked Chief Samas for her as soon as she's eighteen. That would be this fall, after harvest."

"I see," Anketam said thoughtfully. He didn't ask how the old man had come about his knowledge. Old Blejjo had little to do, and on the occasions that he had to do some work around The Chief's castle, he made it a point to pick up gossip. But he was careful with his information; he didn't go spreading it around for all to hear, and he made it a point to verify his information before he passed it on. Anketam respected the old man. He was the only one in the village who called him "Ank," outside of Memi.

"Do you think The Chief will give her to Kevenoe?" he asked.

Blejjo nodded. "Looks like it. He thinks a great deal of Kevenoe."

"No reason why he shouldn't," said Anketam. "Kevenoe's a good man."

"Oh, I know that," said the old man. "But Basom won't like it at all. And I don't think Zillia will, either."

"That's the way things happen," said Anketam. "A man can't expect to go through life having everything his own way. There's other girls around for Basom. If he can't have the prettiest, he'll have to be satisfied with someone else." He chuckled. "That's why I picked Memi. She's not beautiful and never was, but she's a wonderful wife."

"That's so," said Blejjo. "A wise man is one who only wants what he knows he can have. Right now"—he took off his hat and wiped his bald head—"all I want is a dip in that river."

"Swim first and then fish?"

"I think so, don't you? Basom was right about this hot sun."

"I'll go along with you," agreed Anketam.

They made their way to the river, to the shallow place at the bend where everyone swam. There were a dozen and more kids there, having a great time in the slow moving water, and several of the older people soaking themselves and keeping an eye on the kids to make sure they didn't

wander out to where the water was deep and the current swift.

Anketam and Blejjo took off their clothes and cooled themselves in the water for a good half hour before they dressed again and went on upriver to a spot where Blejjo swore the fish were biting.

They were. In the next four hours, the two men had caught six fish apiece, and Blejjo was trying for his seventh. Here, near the river, there was a slight breeze, and it was fairly cool beneath the overhanging branches of the closely bunched trees.

Blejjo had spotted a big, red-and-yellow striped beauty loafing quietly in a back eddy, and he was lowering his hook gently to a point just in front of the fish when both men heard the voice calling.

"Anketam! Anketam! Blejjo! Where you at?"

Blejjo went on with his careful work, knowing that Anketam would take care of whatever it was.

Anketam recognized the voice. He stood up and called: "Over here, Basom! What's the trouble?"

A minute later, Basom came running through the trees, his feet crashing through the underbrush.

Blejjo sat up abruptly, an angry look on his face. "Basom, you scared my fish away."

"Fish, nothing," said Basom. "I ran all the way here to tell you!" He was grinning widely and panting for breath at the same time.

"You suddenly got an awful lot of energy," Blejjo said sourly.

"What happened?" Anketam asked.

"The invasion!" Basom said between breaths. "Kevenoe himself came down to tell us! They've started the invasion! The war's on!"

"Than what are you looking so happy about?" Anketam snapped.

"That's what I came to tell you." Basom's grin didn't fade in the least. "They landed up in the Frozen Country, where our missiles couldn't get 'em, according to Kevenoe. Then they started marching down on one of the big towns. Tens of thousands of 'em! And we whipped 'em! Our army cut 'em to pieces and sent 'em running back to their base! We won! We *won*!"

III

The battle had been won, but the war wasn't won yet. The invaders had managed to establish a good-sized base up in the Frozen Country. They'd sneaked their ships in and had put up a defensive system that stopped any high-speed missiles. Not that Xedii had many missiles. Xedii was an agricultural planet; most manufactured articles were imported. It had never occurred to the government of Xedii that there would be any real need for implements of war.

The invaders seemed to be limiting their use of weapons, too. They wanted to control the planet, not destroy it. Through the summer and into the autumn, Anketam listened to the news as it filtered down from the battlegrounds. There were skirm-

ishes here and there, but nothing decisive. Xedii seemed to be holding her own against the invaders.

After the first news of the big victory, things settled back pretty much to normal.

The harvest was good that year, but after the leaves were shredded and dried, they went into storage warehouses. The invaders had set up a patrol system around Xedii which prevented the slow cargo ships from taking off or landing. A few adventurous space officers managed to get a ship out now and then, but those few flights could hardly be called regular trade shipments.

The cool of winter had come when Chief Samas did something he had never done before. He called all the men in the barony to assemble before the main gate of the castle enclosure. He had a speech to make.

For the first time, Anketam felt a touch of apprehension. He got his crew together, and they walked to the castle in silence, wondering what it was that The Chief had to say.

All the men of the barony, except those who couldn't be spared from their jobs, were assembled in front of Chief Samas' baronial castle.

The castle itself was not a single building. Inside the four-foot-high thorn hedge that surrounded the two-acre area, there were a dozen buildings of hard, irridescent plastic shining in the sun. They all looked soft and pleasant and comfortable. Even the thorn hedge, filled as it was by the lacy leaves that concealed the hard, sharp thorns, looked soft and inviting.

Anketam listened to the soft murmur of whispered conversation from the men around him. They stood quietly outside the main gate that led into the castle area, waiting for The Chief to appear, and wondering among themselves what it was that The Chief had to say.

"You think the invaders have won?"

Anketam recognized the hoarse whisper from the man behind him. He turned to face the dark, squat, hard-looking man who had spoken. "It couldn't be, Jacovik. It couldn't be."

The other supervisor looked down at his big, knuckle-scarred hands instead of looking at Anketam. He was not a handsome man, Jacovik; his great, beaklike nose was canted to one side from a break that had come in his teens; his left eye was squinted almost closed by the scar tissue that surrounded it, and the right only looked better by comparison. His eyebrows, his beard, and the fringe of hair that outlined his bald head made an incongruous pale yellow pattern against the sunburnt darkness of his face. In his youth, Jacovik had been almost pathologically devoted to boxing—even to the point of picking fights with others in his village for no reason at all, except to fight. Twice, he had been brought up before The Chief's court because of the severe beating he had given to men bigger than he, and he had *finally* killed a man with his fists.

Chief Samas had given him Special Punishment for that, and a final warning that the next fight would be punished by death.

Anketam didn't know whether it was that threat, or the emotional reaction Jacovik had suffered from killing a man, or simply that he had had some sense beaten into his head, but from that moment on Jacovik was a different man. He had changed from a thug into a determined, ambitious man. In twenty-two years, he had not used his fists except to discipline one of his crew, and that had only happened four times that Anketam knew of. Jacovik had shown that he had ability as well as strength, that he could control men by words as well as by force, and The Chief had made him a supervisor. He had proved himself worthy of the job; next to Anketam, he was the best supervisor in the barony.

Anketam had a great deal of respect for the little, wide-shouldered, barrel-chested man who stood there looking at the scars on the backs of his hands.

Jacovik turned his hands over and looked at the calloused palms. "How do we know? Maybe the Council of Chiefs has given up. Maybe they've authorized the President to surrender. After all, we're not fighters; we're farmers. The invaders outnumber us. They've got us cut off by a blockade, to keep us from sending out the harvest. They've got machines and weapons." He looked up suddenly, his bright blue eyes looking straight into Anketam's. "How do we know?"

Anketam's grin was hard. "Look, Jac; the invaders have said that they intend to smash our whole society, haven't they? Haven't they?"

Jacovik nodded.

"And they want to break up the baronies — take everything away from the Chiefs—force us farmers to give up the security we've worked all our lives for. That's what they've said, isn't it?"

Jacovik nodded again.

"Well, then," Anketam continued remorselessly, "do you think the Chiefs would give up easily? Are they going to simply smile and shake hands with the invaders and say: 'Go ahead, take all our property, reduce us to poverty, smash the whole civilization we've built up, destroy the security and peace of mind of millions of human beings, and then send your troops in to rule us by martial law.' Are they going to do that? Are they?"

Jacovik spread his big, hard hands. "I don't know. I'm not a Chief. I don't know how their minds work. Do you? Maybe they'll think surrender would be better than having all of Xedii destroyed inch by inch."

Anketam shook his head. "Never. The Chiefs will fight to the very end. And they'll win in the long run because right is on their side. The invaders have no right to change our way of living; they have no right to impose their way of doing things on us. No, Jac—the Chiefs will never give up. They haven't surrendered yet, and they never will. They'll win. The invaders will be destroyed."

Jacovik frowned, completely closing his left eye. "You've always been better at thinking things out that I, Ank." He paused and looked down at his hands again. "I hope you're right, Ank. I hope you're right."

In spite of his personal conviction that he was right, Anketam had to admit that Jacovik had reason for his own opinion. He knew that many of the farmers were uncertain about the ultimate outcome of the war.

Anketam looked around him at the several hundred men who made up the farming force of the barony. His own crew were standing nearby, mixing with Jacovik's crew and talking in low voices. In the cool winter air, Anketam could still detect the aroma of human bodies, the smell of sweat that always arose when a crowd of people were grouped closely together. And he thought he could detect a faint scent of fear and apprehension in that atmosphere.

Or was that just his imagination, brought on by Jacovik's pessimism?

He opened his lips to say something to Jacovik, but his words died unborn. The sudden silence in the throng around him, the abrupt cessation of whispering, told him, more definitely than a chorus of trumpets could have done, that The Chief had appeared.

He turned around quickly, to face the Main Gate again.

The Main Gate was no higher than the thorn-bush hedge that it pierced. It was a heavily built, intricately decorated piece of polished goldwood, four feet high and eight feet across, set in a sturdy goldwood frame. The arch above the gate reached a good ten feet, giving The Chief plenty of room to stand.

He was just climbing up to stand on the gate itself as Anketam turned.

Chief Samas was a tall man, lean of face and wide of brow. His smooth-shaven chin was long and angular, and his dark eyes were deeply imbedded beneath heavy, bushy eyebrows.

And he was dressed in clothing cut in a manner that Anketam had never seen before.

He stood there, tall and proud, a half smile on his face. It was several seconds before he spoke. During that time, there was no sound from the assembled farmers.

"Men," he said at last, "I think that none of you have seen this uniform before. I look odd in it, do I not?"

The men recognized The Chief's remark as a joke, and a ripple of laughter ran through the crowd.

The Chief's smile broadened. "Odd indeed. Yes. And do you perceive the golden emblems, here at my throat? They, and the uniform, indicate that I have been chosen to help lead the armed forces—a portion of them, I should say."

He smiled around at the men. "The Council of Chiefs has authorized the President to appoint me a Colonel of Light Tank. I am expected to lead our armored forces into battle against the damned Invaders."

A cheer came from the farmers,

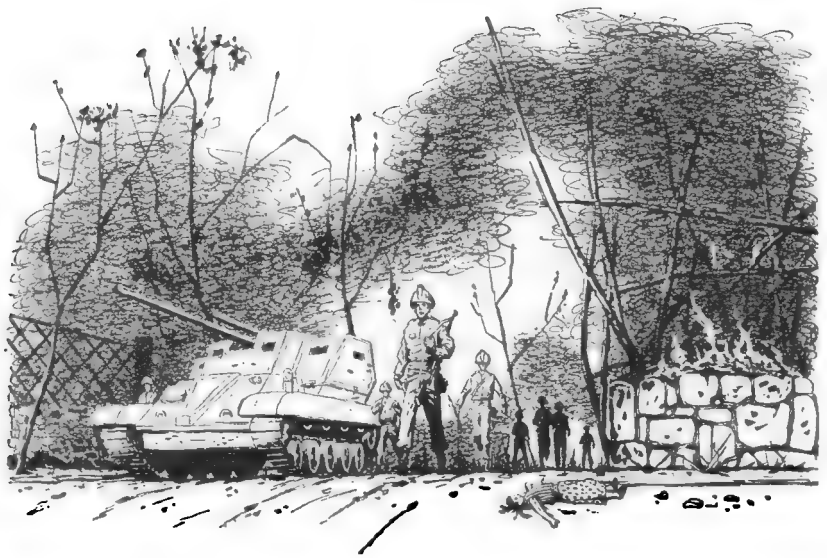
loud and long. Anketam found himself yelling as loud as anyone. The pronunciation and the idiom of the speech of the Chiefs was subtly different from those of the farmers, but Anketam could recognize the emphasis that his Chief was putting on the words of his speech. "Invaders." With a capital "I."

The Chief held up his hands, and the cheering died. At the same time, the face of Chief Samas lost its smile.

"I will be gone for some time," he said somberly. "The Council feels that it will be two or three years before we have finally driven the Invaders from our planet. This will not be a simple war, nor an easy one. The blockade of orbital ships which encircle Xedii keep us from making proper contact with any friends that we may have outside the circle of influence of the damned Invaders. We are, at the moment, fighting alone. And yet, in spite of that—in *spite* of that, I say—we have thus far held the enemy at a standstill. And, in the long run, we shall win."

He took a deep breath then, and his baritone voice thundered out when he spoke.

"*Shall* win? No! We *must* win! None of you want to become slaves in the factories of the Invaders. I know that, and you know it. Who among you would slave your life away in the sweatshops of the Invaders, knowing that those for whom you worked might, at any time, simply deprive you of your livelihood at



their own whim, since they feel no sense of responsibility toward you as individuals?"

Again The Chief stopped, and his eyes sought out each man in turn.

"If there are any such among you, I renounce you at this moment. If there are any such, I ask . . . nay, I plead . . . I *order* . . . I order you to go immediately to the Invaders."

Another deep breath. No one moved.

"You have all heard the propaganda of the Invaders. You know that they have offered you—well, what? Freedom? Yes, that's the way they term it. Freedom." Another pause. "Freedom. *Hah*!"

He put his hands on his hips. "None of you have ever seen a really regimented society—and I'm thankful that you haven't. I hope that you never will."

Chief Samas twisted his lips into an expression of hatred. "Freedom? Freedom from *what?* Freedom to *do* what?

"I'll tell you. Freedom to work in their factories for twelve hours a day! Freedom to work until you are no longer of any use to them, and then be turned out to die—with no home, and no food to support you. Freedom to live by yourselves, with every man's hand against you, with every pittance that you earn taxed to support a government that has no thought for the individual!

"Is that what you want? Is that what you've worked for all your lives?"

A visual chorus of shaken heads accompanied the verbal chorus of "No."

Chief Samas dropped his hands to his sides. "I thought not. But I will repeat: If any of you want to go to the Invaders, you may do so now."

Anketam noticed a faint movement to his right, but it stopped before it became decisive. He glanced over, and he noticed that young Basom was standing there, half poised, as though unable to make up his mind.

Then The Chief's voice bellowed out again. "Very well. You are with me. I will leave the work of the barony in your hands. I ask that you produce as much as you can. Next year—next spring—we will not plant *cataca.*"

There was a low intake of breath from the assembled men. Not plant *cataca?* That was the crop that they had grown since—well, since *ever.* Anketam felt as though someone had jerked a rug from beneath him.

"There is a reason for this," The Chief went on. "Because of the blockade that surrounds Xedii, we are unable to export *cataca* leaves. The rest of the galaxy will have to do without the drug that is extracted from the leaves. The incident of cancer will rise to the level it reached before the discovery of *cataca.* When they understand that we cannot ship out because of the Invader's blockade, they will force the Invader to stop his attack on us. What we need now is not *cataca,* but food. So, next spring, you will plant food crops.

"Save aside the *cataca* seed until the war is over. The seedlings now

in the greenhouses will have to be destroyed, but that cannot be helped."

He stopped for a moment, and when he began again his voice took on a note of sadness.

"I will be away from you until the war is won. While I am gone, the barony will be run by my wife. You will obey her as you would me. The finances of the barony will be taken care of by my trusted man, Kevenoe." He gestured to one side, and Kevenoe, who was standing there, smiled quickly and then looked grim again.

"As for the actual running of the barony—as far as labor is concerned —I think I can leave that in the hands of one of my most capable men."

He raised his finger and pointed. There was a smile on his face.

Anketam felt as though he had been struck an actual blow; the finger was pointed directly at him.

"Anketam," said The Chief, "I'm leaving the barony in your hands until I return. You will supervise the labor of all the men here. Is that understood?"

"Yes, sir," said Anketam weakly. "Yes, sir. I understand."

IV

Never, for the rest of his life, would the sharp outlines of that moment fade from his memory. He knew that the men of the barony were all looking at him; he knew that The Chief went on talking afterwards. But those things impressed themselves but lightly on his mind, and they blurred soon afterwards. Twenty years later, in retelling the story, he would swear that The Chief had ended his speech at that point. He would swear that it was only seconds later that The Chief had jumped down from the gate and motioned for him to come over; his memory simply didn't register anything between those two points.

But The Chief's words after the speech—the words spoken to him privately—were bright and clear in his mind.

The Chief was a good three inches shorter than Anketam, but Anketam never noticed that. He just stood there in front of The Chief, wondering what more his Chief had to say.

"You've shown yourself to be a good farmer, Anketam," Chief Samas said in a low voice. "Let's see—you're of Skebbin stock, I think?"

Anketam nodded. "Yes, sir."

"The Skebbin family has always produced good men. You're a credit to the Skebbins, Anketam."

"Thank you, sir."

"You've got a hard job ahead of you," said The Chief. "Don't fail me. Plant plenty of staple crops, make sure there's enough food for everyone. If you think it's profitable, add more to the animal stock. I've authorized Kevenoe to allow money for the purchase of breeding stock. You can draw whatever you need for that purpose.

"This war shouldn't last too long. Another year, at the very most, and we'll have forced the Invaders off Xedii. When I come back, I expect

to find the barony in good shape, d'you hear?"

"Yes, sir. It will be."

"I think it will," said The Chief. "Good luck to you, Anketam."

As The Chief turned away, Anketam said: "Thank you, sir—and good luck to you, sir."

Chief Samas turned back again. "By the way," he said, "there's one more thing. I know that men don't always agree on everything. If there is any dispute between you and Kevenoe, submit the question to my wife for arbitration." He hesitated. "However, I trust that there will not be many such disputes. A woman shouldn't be bothered with such things any more than is absolutely necessary. It upsets them. Understand?"

Anketam nodded. "Yes, sir."

"Very well. Good-by, Anketam. I hope to see you again before the next harvest." And with that, he turned and walked through the gate, toward the woman who was standing anxiously on the porch of his home.

Anketam turned away and started towards his own village. Most of the others had already begun the trek back. But Jacovik, Blejjo, and Basom were waiting for him. They fell into step beside him.

After a while, Jacovik broke the silence. "Well, Ank, it looks like you've got a big job on your hands."

"That's for sure," said Anketam. He knew that Jacovik envied him the job; he knew that Jacovik had only missed the appointment by a narrow margin.

"Jac," he said, "have you got a man on your crew that you can trust to take over your job?"

"Madders could do it, I think," Jacovik said cautiously. "Why?"

"This is too big a job for one man," said Anketam quietly. "I'll need help. I want you to help me, Jac."

There was a long silence while the men walked six paces. Then Jacovik said: "I'll do whatever I can, Ank. Whatever I can." There was honest warmth in his voice.

Again there was a silence.

"Blejjo," Anketam said after a time, "do you mind coming out of retirement for a while?"

"Not if you need me, Ank," said the old man.

"It won't be hard work," Anketam said."I just want you to take care of the village when I'm not there. Settle arguments, assign the village work, give out punishment if necessary—things like that. As far as the village is concerned, you'll be supervisor."

"What about the field work, Ank?" Blejjo asked. "I'm too old to handle that. Come spring, and—"

"I said, as far as the village is concerned," Anketam said. "I've got another man in mind for the field work."

And no one was more surprised than Basom when Anketam said: "Basom, do you think you could handle the crew in the field?"

Basom couldn't even find his tongue for several more paces. When

he discovered at last that it was still in his mouth, where he'd left it, he said: "I . . . I'll try, Ank. I sure will try, if you want me to. But . . . well . . . I mean, why pick *me*?"

Old Blejjo chuckled knowingly. Jacovik, who hardly knew the boy, just looked puzzled.

"Why not you?" Anketam countered.

"Well . . . you've always said I was lazy. And I am, I guess."

"Sure you are," said Anketam. "So am I. Always have been. But a smart lazy man can figure out things that a hard worker might overlook. He can find the easy, fast way to get a job done properly. And he doesn't overwork his men because he knows that when he's tired, the others are, too. You want to try it, Basom?"

"I'll try," said Basom earnestly. "I'll try real hard." Then, after a moment's hesitation. "Just one thing, Anketam—"

"What's that?"

"Kevenoe. I don't want him coming around me. Not at all. If he ever said one word to me, I'd probably break his neck right there."

Anketam nodded. The Chief had given Zillia to Kevenoe only two months before, and the only one who liked the situation was Kevenoe himself.

"I'll deal with Kevenoe, Basom," Anketam said. "Don't you worry about that."

"All right, then," Basom said. "I'll do my best, Anketam."

"You'd better," said Anketam. "If you don't, I'll just have to give the job to someone else. You hear?"

"I hear," said Basom.

V

The war dragged on. In the spring of the following year, over a hundred thousand Invader troops landed on the seacoast a hundred miles from Chromdin and began a march on the capital. But somebody had forgotten to tell the Invader general that it rained in that area in the spring and that the mud was like glue. The Invader army bogged down, and, floundering their way toward Chromdin, they found themselves opposed by an army of nearly a hundred thousand Xedii troops under General Jojon, and the invasion came to a standstill at that point.

Farther to the west, another group of forty thousand Invader troops came down from the Frozen Country, and a Xedii general named Oljek trounced them with a mere seventeen thousand men.

All in all, the Invaders were getting nowhere, but they seemed determined to keep on plugging.

The news only filtered slowly into the areas which were situated well away from the front. A thousand miles to the west of Chief Samas' barony, the Invaders began cutting deeply into Xedii territory, but they were nowhere near the capital, so no one was really worried.

Anketam worked hard at keeping the barony going during the absence of The Chief. Instead of *cataca,* he

and Jacovik planted food crops, doing on a larger scale just what they had always done in the selected sections around the villages. They had always grown their own food, and now they were doing it on a grand scale.

No news came from off-planet, except for unreliable rumors. What the rest of the galaxy was doing about the war on Xedii, no one knew.

Young Basom proved to be a reasonably competent supervisor. He was nowhere near as good as Anketam or Jacovik, but there were worse supers in the barony.

Anketam found that the biggest worry was not in the handling of the farmers, but in obtaining manufactured goods. The staff physician complained to Kevenoe that drugs were getting scarce. Shoes and clothing were almost impossible to obtain. Rumor had it that arms and ammunition were running short in the Xedii armies. For two centuries, Xedii had depended on other planets to provide manufactured goods for her, and now those supplies were cut off, except for a miserably slow trickle that came in via the daring space officers who managed to evade the orbital forts that the Invaders had set up around the planet.

Even so, Anketam's faith in the power of Xedii remained constant. The invading armies were still being held off from Chromdin, weren't they? The capital would not fall, of that he was sure.

What Anketam did not and could not know was the fact that the Invaders were growing tired of pussyfooting around. Instead of fighting Xedii on Xedii's terms, the Invaders decided to fight it on their own.

Everyone on Chief Samas' barony and the others around it expected trouble to come from the north, from the Frozen Country, if and when it came. They didn't look to the west, where the real trouble was brewing.

Anketam was shocked when he heard the news that the Invaders had reached Tana L'At, having cut down through the center of the continent, dividing the inhabited part of Xedii into two almost equal parts. They knocked out Tana L'At with a heavy shelling of paralysis gas, evacuated the inhabitants, and dusted the city with radioactive powder to make it uninhabitable for several years.

Then they began to march eastward.

VI

For the first time in his life, Anketam was feeling genuine fear. He had feared for his life before, yes. And he had feared for his family. But now he feared for his world, which was vaster by far.

He blinked at the tall, gangling Kevenoe, who was still out of breath from running. "Say that again."

"I said that the Invader troops are crossing Benner Creek," Kevenoe said angrily. "They'll be at the castle within an hour. We've got to do something."

"What?" Anketam asked dazedly.

"Fight them? With what? We have no weapons."

"I don't know," Kevenoe admitted. "I just don't know. I thought maybe you'd know. Maybe you could think of something. What about Lady Samas?"

"What about her?" Anketam still couldn't force his mind to function.

"Haven't you heard? The Invaders have been looting and burning every castle in their path! And the women—"

Lady Samas in danger! Something crystallized in Anketam's mind. He pointed in the direction of the castle. "Get back there!" he snapped. "Get everyone out of the castle! Save all the valuables you can! Get everyone down to the river and tell them to hide in the brush at the Big Swamp. The Invaders won't go there. Move!"

Kevenoe didn't even pause to answer. He ran back toward the saddle animal he had tethered at the edge of the village.

Anketam was running in the opposite direction, toward Basom's quarters.

He didn't bother to knock. He flung open the door and yelled, *"Basom!"*

Basom, who had been relaxing on his bed, leaped to his feet. "What is it?"

Anketam told him rapidly. Then he said: "Get moving! You're a fast runner. Spread the news. Tell everyone to get to the Swamp. We have less than an hour, so run for all you're worth!"

Basom, like Kevenoe, didn't bother to ask questions. He went outside and started running toward the south.

"That's right!" Anketam called after him. "Tell Jacovik first! And get more runners to spread the word!"

And then Anketam headed for his own home. Memi had to be told. On the way, he pounded on the doors of the houses, shouting the news and telling the others to get to the Big Swamp.

By the time the Invader troops came, they found the entire Samas barony empty. Not a single soul opposed their march; there was no voice to object when they leveled their beam projectors and melted the castle and the villages into shapeless masses of blackened plastic.

VII

The wooden shelter wasn't much of a home, but it was all Anketam could provide. It had been difficult to cut down the trees and make a shack of them, but at least there were four walls and a roof.

Anketam stood at the door of the rude hut, looking blindly at the ruins of the village a hundred yards away. In the past few months, weeds had grown up around the charred blobs that had once been the homes of Anketam's crew. Anketam stared, not at, but past and through them, seeing the ghosts of the houses that had once been there.

Behind him, Memi was speaking in soft tones to Lady Samas.

"Now you go ahead and eat, Lady.

You can't starve yourself to death. Things won't always be this bad, you'll see. When that oldest boy of yours comes back, he'll fix the barony right back up like it was. Just you see. Now, here; try some of this soup."

Lady Samas said nothing. She seemed to be entirely oblivious of her surroundings these days. Nothing mattered to her any more. Word had come back that Chief Samas had accompanied General Eeler in the fatal expedition towards the Invader base, and The Chief had been buried there in the Frozen Country.

Lady Samas had nowhere else to stay. Kevenoe was dead, his skull crushed by—by someone. Anketam refused, in his own mind, to see any connection between Kevenoe's death and the fact that Basom and Zillia had disappeared the same day, probably to give themselves over to the Invader troops.

A movement at the corner of his eye caught Anketam's attention. He turned his head to look. Then he spun on his heel and went into the hut.

"Lady Samas," he said quickly, "they're coming. There's a groundcar coming down the road with four Invaders in it."

Lady Samas looked up at him, her fine old face calm and emotionless. "Let them come," she said. "We can't stop them, Anketam. And we have nothing to lose."

Three minutes later, the groundcar pulled up in front of the hut. Anketam watched silently as one of the men got out. The other three stayed in the car, their handguns ready.

The officer, very tall and straight in his blue uniform, strode up to the door of the hut. He stopped and addressed Anketam. "I understand Lady Samas is living here."

"That's right," Anketam said.

"Would you tell her that Colonel Fayder would like to speak to her."

Before Anketam could say anything, Lady Samas spoke. "Tell the colonel to come in, Anketam."

Anketam stepped aside to let the officer enter.

"Lady Samas?" he asked.

She nodded. "I am."

The colonel removed his hat. "Madam, I am Colonel Jamik Fayder, of the Union army. You are the owner of this land?"

"Until my son returns, yes," said Lady Samas evenly.

"I understand." The colonel licked his lips nervously. He was obviously ill at ease in the presence of the Lady Samas. "Madam," he said, "it would be useless for me to apologize for the destructions of war. Apologies are mere words."

"They are," said Lady Samas. "None the less, I accept them."

"Thank you. I have come to inform you that the Xedii armies formally surrendered near Chromdin early this morning. The war is over."

"I'm glad," said Lady Samas.

"So am I," said the colonel. "It has not been a pleasant war. Xedii was—and still is—the most backward planet in the galaxy. Your

Council of Chiefs steadfastly refused to allow the"—he glanced at Anketam—"workers of Xedii to govern their own lives. They have lived and died without proper education, without the medical care that would save and lengthen their lives, and without the comforts of life that any human being deserves. That situation will be changed now, but I am heartily sorry it took a war to do it."

Anketam looked at the man. What was he talking about? He and his kind had burned and dusted cities and villages, and had smashed the lives of millions of human beings on the pretense that they were trying to help. What sort of insanity was that?

The colonel took a sheaf of papers from his pocket.

"I have been ordered to read to you the proclamation of the Union President."

He looked down at the papers and began to read:

"Henceforth, all the peoples of Xedii shall be free and equal. They shall have the right to change their work at will, to be paid in lawful money instead of—"

Anketam just stood there, his mind glazed. He had worked hard all his life for the security of retirement, and now all that was gone. What was he to do? Where was he to go? If he had to be paid in money, who would do it? Lady Samas? She had nothing. Besides, Anketam knew nothing about the handling of money. He knew nothing about how to get along in a society like that.

He stood there in silence as his world dissolved around him. He could hear, dimly, the voice of the blue-clad Union officer as he read off the death warrant for Xedii. And for Anketam.

THE END

MATING PROBLEMS

BY CHRISTOPHER ANVIL

Arithmetic does not work well in all circumstances, in all types of situations. For instance, one insoluble problem plus another insoluble problem does not equal two insolubles.

Illustrated by Bernklau

ART leaned his weight against the length of tough vine while Ed slid the pole under it again and heaved up. There was a snapping popping sound as a few more tendrils parted. Ed grunted, straightened up, mopped his neck and forehead.

"Rest a minute."

Bart nodded, and the two men stood beside the vine, breathing hard. Across the clearing from them was an L-shaped row of log cabins. Three cabins near the middle of the L were fire-blackened on the side facing the clearing. The center cabin had its door charred through, and its roof burnt partway off. In the field, a little beyond the burned group of cabins, stood a big red dozer. The protective coating on the side of the dozer toward the forest was blistered and peeling.

Bart saw this without really being aware of it. He even glanced over the third of the three cabins without noticing the shape in lighter brown outlined against the charred black. A stranger would have been struck by this shape, which looked like a life-sized, child's drawing of a woman. The legs and trunk were much lighter than the black wood, with a darker outline of coat and skirt, and a faint, arm-length blur reaching toward the blackened cabin door. Bart was used to this, and vaguely noticed it only when Ed said, "I wonder how they'll make out?"

Bart looked around, noticed a little group of men around and under the dozer, and two others slowly walking back from the far end of the field, where there was a row of low rectangular mounds with fresh evergreen boughs laid on them like flowers. Opposite the cabins was a thing that Bart looked at only briefly. He glanced at Ed, and realized that was what Ed was looking at. Ordinarily, Bart avoided the sight of this thing, but he looked at it now.

Across from the cabins, looking unreal and foreign against the trees, was a tall, silvery cylinder about fifteen feet through the base, and tapering to a slender rod at the top. Up the side of this cylinder, and in a ring around the top third of it were big pink letters spelling out:

HI THERE! III

At the base of the cylinder, looking up at it, were three men. Two were carrying a long rough ladder made of poles. The other had a coil of rope and a crowbar.

Bart looked away from the *Hi There! III,* and spat on the bare dirt. He said, "If you want the truth, Ed, they've got about as much chance to get in there with that crowbar, as you and I have to cultivate this field with our fingernails."

"I'll bet there's a lot of stuff in there, if we *could* get it open."

"Sure," said Bart. "As I said the middle of last winter."

Ed looked uncomfortable. Bart said, "We could have chopped him out of the bush in a day, if we'd all worked at it. While the body was intact, we could have held his hands to the lockplate, opened that ship's

hatch, and now we'd have it done and over with."

"We had to bury the women."

"Will you kindly tell me why we couldn't have waited a day longer?"

Ed's eyes glinted. He said evenly, "My Nan had a hard life here."

Bart shut his eyes a moment. He said carefully, "I know that, Ed. She was a hard-working woman."

"She was. A good woman."

"That's right."

"It is."

"But he could have waited one day."

"It wouldn't have showed respect. If heavy snow came it might have been spring before we—"

A throaty female call interrupted them.

They looked around. A tall shapely woman wearing a thin dress stood away from the end cabin and called, "*Sup*-per! Come and get it, boys!"

She repeated this call several times. Bart and Ed glanced at each other. Bart thought of the conversation just past, and said, "I'm sorry, Ed. I don't know how I got onto that again."

Ed's face creased into a slow smile. "That's all right. You may be right, for all I know. I just couldn't have done it that way, that's all."

They started across the field, the raw earth lumpy underfoot. In front of them the woman who had called turned and started back toward the cabin. It would have required great preoccupation not to see that the dress she was wearing tightly molded her figure. This wasn't ideal in a colony where four men had lost their wives in the last six months; but then, this was just one of her ways of stirring up trouble.

Ed squinted at the woman, and growled, "Maybe I shouldn't say it, seeing I'm his brother, but it seems to me Sam could have found a better wife to bring out here than her."

Bart nodded. "If you could persuade him to tone her down a little, it would be a big help."

Ed grunted. "I've tried to warn him what's going to happen. Look what I got for my pains." He put his finger to his lip, to show a badly chipped front tooth.

Bart shook his head. They walked in silence to the cabin, and pushed open the door.

A long table was set up inside the cabin, and two attractive, plainly-dressed women with severe facial expressions where putting stewed meat and potatoes on the table. A tall well-built man had his back turned and was laughing and talking to Sam's wife, who said, "That's simply fascinating, Lonny. You tell me the rest after supper, now."

Ed shut the door hard, and Lonny turned around. He was about six feet tall, and had wavy black hair which he managed to trim short and neat. He was clean-shaven, and smiled with a flash of white teeth.

Ed said, "Sam's coming."

"That so?" said Lonny. He laughed and looked at Sam's wife, who smiled.

Bart said, "Any news?"

Lonny glanced at Bart, and said, "Oh, on the uniwave?"

Bart nodded, and ladled some of the steaming hot stew into his bowl.

Lonny said, "I was just telling Linda. We've got visitors coming. Women."

Bart spilled some of the stew. "Women?"

"Yeah."

The door opened and several bearded, tired-looking men filed in. One was a powerfully-built man with a pugnacious look. Sam's wife gave a little throaty cry as he came in. He strode over to her with a possessive look, and bent to kiss her, She tilted her head back, and leaned close to him. The room was silent as they kissed. Bart glanced around and saw that every male eye in the room except his own was fixed on this kiss.

The door came open again, and some more men came in. These were the three from the ship. They were talking as they came in, but stopped as they saw Sam and his wife. In the silence that followed their closing of the door, the kiss went on. One of the men who'd come in glanced around and grinned. "Why so quiet? This a library or something. Hey, Lonny, what's the news?"

Lonny turned around, his face flat and pale.

Sam's wife was now making little noises in her throat. One of the other women stamped her foot, set a tray down hard, and went through an inner door to the other room of the cabin. As she went out, she slammed the door behind her.

The kiss was now gradually starting to break up. The grand finale always came as Linda broke away from Sam, her gaze fixed on his, lips tremulous, and a promise plain and clear in every motion. In just a moment now, she would give a shaky half-moan, half-sigh, then turn away and leave the room. Bart was waiting for this moment. So were the rest of the men in the room. Just before it came, Bart said clearly, "Lonny says we're getting some visitors—a bunch of new *women*."

The men at the table and standing by the door blinked and glanced at Bart. Bart was watching Linda, and saw her eyes narrow. Bart grinned and said, "You said that, didn't you, Lonny? About the women?"

Lonny took a deep breath. "Yeah."

Every male in the room except Bart and Sam was now watching Lonny, who glanced down frowning at his hands clenched white-knuckled at the edge of the table. Bart was still watching Sam's wife, who cast a venomous glance at him and went out, closing the door a little harder than usual. Sam blinked, then turned around with a puzzled look.

Somebody said, "Snap out of it, Lonny. What's that about women coming? Is that the truth?"

Lonny nodded.

There was an eager silence, and Lonny said, "It isn't what you think. You know what ship they're coming on?"

"No. It's not time yet for the supply ship."

Lonny said bitterly. "Well then,

brace yourself. They're coming on the *Hi There! IV.*"

There was a moment of silence. In this silence, there went through Bart's mind the whole chain of events that had come about after the *Hi There! III* came down. He remembered the surprise of the colony as the shining space yacht set down during the first real flurries of winter. He remembered the eagerness with which everyone greeted the stranger. After all, he would have news. Anything seemed welcome that would vary the dull monotony of winter. Bart could still remember the big hatch swinging open and the stranger floating out on a fair-sized dish-shaped grav-skimmer, glancing down and aiming a glittering contraption with a multitude of knobs and lenses at them, and saying:

"Stay just like that, there. That's it. Ah." There was a clicking and a flashing, then the skimmer drifted down to a little above their level. The stranger, nattily dressed, leaned over the side. "Any sport roundabout?"

"Sport?" said someone, blank-faced.

"Sport. Hunting. Fishing. You know."

Bart said, "You're a little late. Most of the meat animals on this planet either hibernate or go south for the winter. You'd better leave the fish alone. We lost a man-eating fish when we first got here."

The visitor's eyebrows climbed. "Really?"

"Yes. Some of the fish are poisonous. We don't know which are and which aren't."

"Is that so? Fascinating." He glanced away, then looked back. "Do you bury your people?"

"What?"

"When they die. Do you bury them?"

Bart frowned. "Of course. Why?"

"Where's this chap buried? The one who ate the fish."

Bart glanced across to the far edge of the field, where snow was heaped on the arms of a rough wooden cross.

The visitor followed Bart's gaze. "Oh, yes. Fine." He raised his complexity of knobs and multiple lenses. Snap! Whir. "Splendid," he said. He glanced at Bart. "Any more graves handy?"

"No," said Bart.

"Do you have any scenery? Anything worth looking at?"

Bart didn't say anything for a moment, and the visitor said, "Well, I'll look around. Don't let me keep you." The skimmer rose and paused. The lenses swung across the clearing toward the cabins. Snap! Whir. Snap! Whir. Snap! Whir. The skimmer swung off toward the south and vanished over the trees. The crowd remained standing at the base of the ship. Up above, the big hatch swung silently shut.

Someone turned to Bart. "Too bad you didn't tell him the fish were good to eat."

Before the coming of the *Hi There! III,* Bart could remember that

the colony had been troubled with grudges, misunderstandings, poor crops, lean hunts, insects, wild animals, a lack of tools, equipment and conveniences, and all the things that plague the first isolated colonies on new worlds. But they had never before felt quite the way they felt after the *Hi There! III* came.

This chain of thought ran on through Bart's head as he looked at Lonny and the other silent men around the table. One of them said thickly. "Who's on the *Hi There! IV?*"

Lonny said, "I don't know if I got the name right. I think it was Mrs. Sidney Siddleigh-Varnov. That would be his wife . . . I mean widow. And her three daughters."

"When are they coming?"

"Tonight."

Bart said, "Did you talk to her yourself?"

"No. Brewster at South Two called me up. They came down there yesterday. The woman wanted to know what happened to her husband. Brewster was sympathetic, at first. He told her her husband had landed here. When he tried to tell her what happened later, she got mad. Brewster said she instructed him to inform us that she was coming here immediately and would demand a satisfactory explanation. I think that was how it was worded."

A noise of disgust went around the table.

Bart said, "Well, let's eat."

After supper, Bart and Ed went back across the field to the root. The sun had set, but it was still light. Ed picked up his pole and slid it under the root. Bart took hold of the length of vine. They heaved. There was a light snapping noise, like the ripping of cloth. They looked at each other.

Bart said, "It's rooted again."

Ed nodded. "I wish we had the dozer going. The dozer could dig this out in no time now."

They heaved, and pried. Occasionally, there was the loud snap and pop of sizable rootlets parting. When they could get no further prying at it, they dug. Finally they stopped to rest.

Ed said, "At least, *he* came in the winter."

Bart blinked, then saw that Ed was looking toward the three men working on the *Hi There! III*.

"Yeah."

"Then," said Ed, "at least we had our work done. She's going to get here just when we've *got* to put everything we've got into our work. Otherwise, we starve this winter."

Bart nodded. "But I will bet we *don't* get much work done while she's here."

Ed glanced down at the root, and said stubbornly, "We're going to get this out."

Bart glanced down at the thing and nodded. He looked up at the chopped-off dead vine dangling overhead. It was thick and tough-looking, just as the vine attached to the live root was thick and tough. Bart noticed a trace of green on the root. "We aren't going to have much time

to do it. That thing is putting out shoots already."

"We can't let it get into its second year!"

"I know." He glanced at Ed. "You want to work all night? We can get it out by morning."

Ed nodded. They built a small fire not far away, piled up plenty of extra wood to have on hand, and went on working. Gradually, it got dark.

It was late at night when they came to a place where the root had a head-sized bulge in it, then narrowed down and divided into two parts, each no bigger than a man's thumb.

"Ahh," said Bart, "here we are." He felt along the roots and carefully dug away the dirt around them. He tugged carefully then dug some more. He felt Ed's hand on his shoulder. The hand tightened. Bart stood still.

Ed growled, "Wind's shifted. Listen."

Bart straightened up slowly. There was a light breeze on his face, from the direction of the cabins. He heard a low masculine voice, and a higher-pitched woman's voice. The sounds of the woman's voice reached him distinctly. "Lonny, dear, what if Sam should wake up?"

Ed swore in a low strangled voice, and started to move forward. Bart grabbed his arm. "Wait a minute. She's going to make trouble no matter what we do. If we stop her tonight, we'll have trouble tomorrow night. But if we get this root out now, we're through with it. If we don't, there'll be no end of trouble."

"She's my brother's wife."

Bart groaned. "Yes, but look, Ed, you can't *stop* her. We *can* stop this root."

"I've got to do it. Let go my arm."

Bart let go. Ed disappeared into the darkness.

Bart swallowed. He bent down and felt the root. He took a deep breath, and worked slowly. The root was only the thickness of his thumb, but it remained that way as he dug. He tugged at it gently, but it stayed firm.

From across the field as he worked came a low giggling. Then there was a gruff voice and a sort of indrawn scream. Next came a thudding and grunting noise. Bart listened to it for a while, then went back to work on the root. After a while, there was a louder thud, and he heard Ed's voice saying what sounded like, "You stay right here."

"Good," thought Bart. He consoled himself that at least Ed had won. Not that he could see what good it would do. He was thinking this several minutes later, when there was a thunderous roar, a blaze of light, and a slim silver shape dropped toward the clearing.

Bart jumped out of the hole and dove into the nearby forest. It had suddenly occurred to him that the ship might land right on top of him. But when he looked around, he saw that it had settled farther down the field. The outside of the ship was a blaze of floodlights. Bart saw the

words *HI THERE! IV*. Then he saw something else.

The ship's lights lit brightly the cabins and the people staring out. They also lit Ed, his face bruised and his clothing torn. In addition, the lights lit Sam's wife, who was standing as if frozen in a torn and fairly skimpy nightdress.

The door of Sam's cabin came open. Sam came out and glanced around. "Linda! Where are you? *Linda!*"

Sam stopped, looking at Ed with his face bruised, and Linda in her nightdress. Next, Sam looked at the people in the doorways, looking at Linda and Ed. Sam stepped back into the cabin and came out with a wrench in one hand. He walked steadily toward Linda and Ed.

Linda said, "Sam, it isn't—" Her voice trailed off, then she tried again. "Sam, dearest . . . you don't . . . understand."

Ed didn't say anything, but mere-

ly looked grim as his brother came toward them.

Bart fought off a sense of paralysis and got to his feet. He shouted, "It wasn't Ed, Sam! Look at his face! He just fought for you! *It wasn't Ed!*"

This had no more visible effect on Sam than shouting at a tornado would have had.

Bart started to run, then he saw something else.

At the door of Lonny's cabin, at the far end of the L-shaped row of cabins, Lonny was looking out, one hand on the door frame. Lonny's face was bruised, with one eye swollen shut and the other half-shut. His cheek was cut, and his nose bloody.

Sam stopped, looking from Lonny to Ed. Suddenly, he said, "Now I see it!" He threw down the wrench.

There was a sharp *whack,* the noise from a motion so fast Bart missed it. Then Linda was stretched out flat on the ground. Sam bent down, gripped her roughly, and threw her over his shoulder like a sack of grain. He started back to his cabin.

Ed bent over and picked up the wrench. He looked around uncertainly, then glanced at the ship. Bart glanced at the ship. The hatch was open, the four women were staring out. Bart started toward them, thinking this was something else that might as well be gotten out of the way as quickly as possible. Ed came along, and several other men apparently had the same idea.

The women stared out the hatch as if paralyzed. Suddenly one of them said, "Don't . . . don't you come near us! Keep back!"

Slam! The hatch was shut.

Bart looked at Ed, then suddenly laughed. "Something tells me they don't think we treat women very well on this planet."

Together, the two men went back to digging out the root. By six o'clock in the morning, they were exhausted; but they had dug up the root. They piled the last remaining sticks on the coals, and hunched close to the fire as the sticks caught with little spurts of flame.

Ed said, "Now what? Carry it off into the forest?"

"Well," said Bart, "if we can, we want to fix it so it stays fixed. No matter how far we carry it, it'll take root where we set it down, and go to seed. Some of the seeds will scatter, some will root, and we may have this all over again."

There were footsteps behind them and they turned around. Sam was standing there. He smiled, and said, "I'm sorry, Ed. You tried to tell me."

Ed said, "That's all right."

"I'm sorry about your tooth. I shouldn't have hit my own brother."

"Can't be helped. You have to do what you think's right."

Bart was trying to understand Sam's cheerful look. As far as Bart could see, Sam should look anything but cheerful.

Ed said, "About Linda, Sam—"

Sam said, "She'll be all right. If she tries anything again, I'll brain her. She knows it."

Ed nodded. Bart stared into the fire. Sam said, "You fellows been working pretty hard. Thought I'd come out to help."

Ed said, "We got it dug up. We're figuring what to do with it."

"Burn it?" said Sam. "No, I see that's no good. The first warmth would set it going, same as a heavy rain."

Ed nodded. "We can't chop into its roots, either. That'd start it, too."

Bart said, "If we could sling a rope over a high limb and haul it up into a tree, could it root from there?"

"It'd send stalks down," said Ed. "The thing is, we should have gotten it last fall. Then we could have chopped it up during cold weather, and burned it a piece at a time."

"Well, we've got to think of something."

Ed said, "Only, we've got to do it soon. See those buds?"

In the gray light of dawn, it was evident that the green buds were swelling. The three men hunched around the thing, considering where to go. Their thoughts were interrupted by a loud *clang*. They looked up.

The hatch of *Hi There! IV* was opened out. A rather handsome woman in her late thirties looked out, with a couple of girls of eighteen or nineteen peering out behind her. The woman's nose looked pinched. She said, "I am going to lift ship and set down in a clearing to the north of here. I don't want my girls exposed to such . . . indecency . . . as they were forced to witness last night. But you are going to explain to me very clearly and fully, precisely what happened to my husband. I have a mobile turret on board this yacht. There may be no law on this planet, but I shall see to it that you . . . animals . . . pay your legal debts in full."

The hatch slammed shut. Bart, Ed, and Sam glanced at each other. They carried the root into the woods, where they watched the take-off.

Ed said angrily, "A mobile turret."

Sam said, "With her interfering we'll *never* get our work done. Almost got the dozer fixed, too."

Bart said, "About where to put this root, now."

The three of them looked at each other. A little glint seemed to pass from eye to eye.

Ed said, "There's only one clearing to the north of here that I know of. That's got a stream running through it. Where they tried to start a colony once before."

"I know the place."

They chopped down some saplings, made a rough frame, got strips of hide to bind it together, and put the big root on it. Then they started out through the woods.

When they were almost at the clearing, they paused to peer through some bushes on a low hill. The ship was near a gully that had a stream trickling along the bottom of it now, and when the spring rains came would be a roaring river.

Sam said, "Looks like she wanted to stock up on water."

Ed said, "If we sneak down that

gully, what's the chance she'll see us?"

Bart nodded. "Good idea. I'll go out and distract them. Suppose you work around out of sight, and I give you fifteen minutes to get to the gully. Then I'll go out and talk to them, and you whistle like a nightbird when you get the thing in place."

"All right," said Ed. "But when we whistle, run! When this root feels the water, it'll think the spring rains have come for sure."

Bart nodded. "Don't worry. I'll run, all right."

He waited fifteen minutes after the others had left, then got up, and went well to his right so he wouldn't get caught between ship and gully when the root was set down. He dropped into the gully, stepped across the water, climbed out, and started toward the ship.

The woman looked out the hatch, pinch-nosed. Various attractive girls peered out behind her. Now that there seemed to be no danger they had a bold look Bart found irritating. None of them said anything, but they all looked him over from head to foot, as if he were a display in a window.

Bart looked at the woman. "I'd like to tell you what happened to your husband."

She looked back at him coldly, "It's fortunate for you that you've decided to see reason. I am not bluffing when I say that I have a turret."

"In the ship with you?"

"In the ship with me. Now get on with your explanations."

"Your husband landed here," said Bart, "around the beginning of winter. He took a great number of what I suppose were photographs with some kind of elaborate camera. We warned him about certain dangers on the planet. We tried to tell him this isn't Earth. But your husband was not exactly approachable, and he didn't come to us for advice about what to avoid. Possibly all his equipment gave him a false sense of security. He blundered into a sawtooth plant—"

"A what?"

"Sawtooth plant. It has a spray of long wiry stalks radiating from a large, urnlike cup in the center. These stalks have big thorns, that angle sharply back toward the cup. If you get caught in it and struggle, you no sooner get free of one set of thorns on stalks than you're caught in another—and closer to the cup. The only way to get loose from the thorns is to move forward. Then if you try to pull back, they catch you again. Eventually, you end up in the cup. The cup secretes a disgestive fluid. The plant is carnivorous."

The woman turned pale. "Did Sidney—?"

"He got in it. He put up quite a struggle."

"And you didn't help him?"

"He had a sort of cylinder," said Bart. "A fusion pistol, I think it's called. We shouted to him to stand still. It was winter, you see, and the plant wasn't active. If he had stood still, he'd have been all right. But instead, he pulled out this gun and tried to fight the plant. He was like

a man caught in a barbed-wire fence who tries to shoot his way free. In the process, he burned away part of the plant, but his aim was a little off, and he also set three of our cabins on fire, killed two of our women outright, and burned another so badly she died later. One of the women he killed was a doctor. Because of her death and the loss of medicines in the fire, we couldn't care properly for another woman who got sick. She died, too."

"That's dreadful. What . . . where is Sid now?"

"In the plant."

The woman's hand rose to her mouth. "You mean, you *left* him there?"

"Personally," said Bart, "I was in favor of getting him out. The other men didn't go along. We buried the women, and then a blizzard came along and covered everything up. By spring, we were too worn out to go down and wrestle the sawtooth plant for him. Besides, we had other work to do."

"Poor Sidney. Did he—" She frowned. "Just a moment, now. You say the plant was inactive. In that event, it might entangle a person, but it could hardly kill him."

"No," said Bart. "One of us shot him with an enzyme-tipped dart before he burned us all to a crisp."

"You *shot* him? But he didn't kill those people intentionally. He would have paid for every bit of damage. Gladly."

Bart took a deep breath. "Try and tell that to a man who's just seen his wife burned alive. Your husband was still letting out blasts from that gun. He *had* to be stopped."

The woman's nostrils grew pinched again. "I can't save him now," she said, "but I certainly intend to see to it that he has a decent funeral, at least. You are going to get him out of that dreadful plant, and you will construct a . . . a—"

"Casket," said Bart in disgust. "Not right now, we won't. We have to cultivate, plant, clear, cut wood, hunt—"

"You will do what I say first. Then you can do whatever you want."

"It will be too late, then. We have to do it in season, or it's no good. Then we'll starve."

"That's unfortunate. You should not have killed my husband."

There was a clear warbling note. A thin tendril snaked up over the bank of the gully, and started to cast around in various directions.

Bart said sharply, "Do you have plenty of food and water in there, and a good supply of air?"

The woman looked startled. "Of course. What—"

"Lock the hatch!" yelled Bart. He turned and sprinted. He ran till he was out of breath. He leaned against a tree till he recovered, then he went to find Ed and Sam, and the three of them watched from a low hill.

Where the middle of the clearing had been was a low jungle of broad green leaves. There was a higher mound in the center, with long stalks swinging slowly around from the top

of it, groping for attachment. From under this mound came a blast of dirt and flame. The mound strained upward and dropped back. There was a loud roar. Big leaves blew away to show a net of tangled vines gripping the *Hi There! IV*. In a blaze of light, the vines nearest the center withered away. Those farther out began to glow red, smoke, and burst into flame.

The three men watched intently.

The stalks on top of the mound dove to the ground in long arcs. New tendrils rose from the foliage on all sides and twined around the ship. The ship heaved up and dropped back. Big leaves blew away. New tendrils snaked in and grew thick. There was a series of short blasts from the ship. The roar of the rockets and whine of the gravitors alternated with the sizzle and pop of roasting vegetation. Through clouds of steam and smoke the three men could see a fist of big vines gripping the middle and upper sections of the ship.

Ed said, "She may or may not kill it. But I doubt it'll have much strength left to make seed."

"What's more," said Bart, "since that vine is wound around the hatch, we should be able to work in peace for a while."

Sam nodded. "We'll come back later on. See how things are. I imagine a few weeks fighting that vine will tame the women down some."

Bart was checking the cargo list with a crewman from a supply ship later on that year. The crewman was looking around with an expression of puzzlement. "Say," he said, "I was sorry to hear about your . . . your bad luck last winter. But don't I see some new women here that weren't here before?"

"Volunteers," said Bart. "They came out to join us."

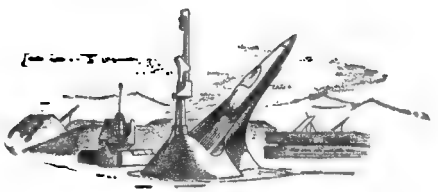
The crewman looked as if he were seeing a river that flowed uphill. He said weakly, "How did you manage that?"

"Well," said Bart, "we had two problems. Either one alone was too tough for us. They both had to be settled fast, like the problem of two mad dogs coming at you from opposite directions."

"Yeah? What did you do?"

"We got out from in between," said Bart. "We combined them. Then they settled each other."

THE END



HOW TO WRITE SCIENCE FACTION

BY LES COLLINS

Once upon a time, a gadget came with a printed instruction sheet. Now, of course, they come with a cross-indexed, bibliographed instruction library ...and somebody's got to write those instructional tomes!

"Don't ever use sesquipedalian polysyllabics continuously; however, remember penecontemporaneously not to use solely abecedarian monosyllabics."

Quoted from *An Unfit Guide to Technical Writing*

THE quote above could have been stated so much more simply as: when you write, don't use only long words or only short words. The terrible truth of the matter is that we cannot communicate very well with each other. We try, but we don't do the job as fully or ably as is desirable. And if vital information is transmitted above or below the listener's level, the results are confusion and inattention.

Perhaps efficient communication is too much to expect from an animal that twenty thousand years ago was attempting to sign its name to cave paintings—an animal that learned to correlate sound with symbol a scant seven thousand years back. Perhaps simplicity *is* asking too much, but there are many such animals today—not all of them good—and time is no longer measured in millennia but in microseconds.

Consider the stereotype American scientist or engineer. The man is precise, meticulous, exact; he checks and double-checks; he must be sure. The

same man, generally speaking, cannot rapidly tell his associates what he has done.

We haven't the time to wait: in one hour, there are 3,600,000,000 microseconds. In just one hundred microseconds, the fireball is fifty feet across and some three hundred thousand degrees Centigrade. That well-known biochemist who hears the sound of his own panting in the race to keep up with published abstracts has ignored an important factor. Were the abstracts *clear* as well as concise, the race would not be so strenuous.

We cannot communicate very well with each other, even in our own specialized field. Of course, the man who tries to understand another, "completely separate" field of science is as lost as the layman—and it is by no means the fault only of terminology. It is also, bluntly, crummy writing.

We are smugly proud of our ability to throw voices, words, and pictures over thousands of miles; the next logical step would seem to be a way of understanding voices, words, and pictures. You'd think someone would work on it. Good news—someone *is;* a start has been made.

As might be expected, it happened unintentionally; once born, however, the accident has grown lustier and lustier. This strange phenomenon crept through the back door of the American industrial and military scene. "Strange," because it is so little known and understood; a "phenomenon," because of its rapid growth against odds and red tape. It is technical communication.

After specialized personnel in specialized sciences—particularly, all phases of engineering—rave, rant, and spout the usual gobbledy-gook, shop-talk, and jargon, then technical communication tries to put the result into a form that can be understood by human beings.

It ain't easy.

Technical communication is so diverse, with many little corners and specialties peculiar to themselves, that a full description would be impossible. However, the major divisions can be blocked in as technical publications, technical motion pictures, and technical advertising and public relations. Another technical, technical art, is a vital support that generally acts within each division. All portions of the field are interwoven; there is no sharp demarcation.

Tech communication, in a sense, plays the role of middleman. Never has there been a stronger need for such, but the middleman is looked on with traditional dislike. Engineering disapproval—but only the few engineers with writing ability admit the reason. The engineer is worried he will lose authority. Management disapproval—but management makes no bones about it. Middlemen are overhead, a-necessary-evil-by-God-but-still-overhead.

From the middleman's point of view, the disapproval can be weighed against the day of recognition, a day

that is coming rapidly,[1] a day when technical communication will be recognized as an entity, not an adjunct. So the technical middleman goes quietly about his business. Besides, he is getting more of a kick out of the trade magazines than s-f magazines—industry is about ten years ahead of science fiction, and that's a switch.

The public relations division parallels conventional PR in that the main objective is selling the viewpoint represented. Unfortunately, the objective is difficult because of the training of the personnel to whom tech PR appeals. The scientist must ask *why?* about all details. To answer, the tech PR man or woman must be a little smoother and slicker than a Madison Avenue counterpart. He or she generally is.

As an information arm, PR answers questions from individuals and companies, both large and small. And pictures—everyone wants pictures of some phase of some program. Technical public relations must determine why the pictures are wanted. In many cases, the tangled skein of Security must be unraveled.

For instance, you—as an indivdual—might wish pictures of the latest intercontinental ballistics missile (MAMMOTH) built by South Conheetin, Inc. Your chances of getting these pictures are slightly less than the proverbial snowball's. The same you, represnting a company that makes a component part of the missile, will do better. How much better is partly the responsibility of South Conheetin's PR.

Technical advertising overlaps public relations in many areas; a good example is trade magazines—as opposed to the professional books, such as *Journal of the American Chemical Society* or *Proceedings of the IRE.* Look at the articles in the trade magazines: title A is written by President Whom of Such and Such Corporation, manufacturer of the magnetohydrodynamic transducer; title B is by the chief engineer of Impossible Electronics. So it says, anyway.

Such articles, with surprisingly high frequency, are written by an unknown, sweating face on the advertising or public relations staff. In fact, there are some agencies devoted wholly to ghost writing. Of course, President Whom's speeches—

Technical advertising goes far afield, depending on what the advertiser wants to get. It may be engineers, sales, or tax deductions. The form of advertising must appeal in various ways, and at times it can be sneaky.

What have you got to sell? and What's good about it? are still questions that advertising must answer, but

[1] The day may arrive sooner than I'd thought. IRE and other groups are attacking the comunication problem. Many trade magazines have discussed it, but never have I seen a more dramatic statement than that of Elmer Ebersol, editor, *Electronic Equipment Engineering* (September 1958):

"Man's progress through the centuries has depended largely on his ability to communicate with his fellows. To keep ahead in advanced technology, all posible duplication of engineering effort must be avoided. What one engineer has discovered must be made clearly known to his fellow engineers. He must communicate!

"Time is short. We must get our ideas across to our fellow engineer. We must get his ideas straight. This way we will help keep United States technology second to none. COMMUNICATE, AND LIVE!"

the job is complicated because of the audience.

Engineers have an aesthetic sense despite prevalent rumors. Engineers will also violently deny having this sense. Technical advertising tries to appeal to it without the engineer's knowledge; by all means, don't let 'em know! It's said that a motivational research man, after two weeks in electronics went gibbering back to his consumer accounts—and his analyst. The story, unfortunately, is probably false, but it throws a little light on the problem.

We shall not break down the types of technical ads—they follow regular advertising in the main. However, there is one type, peculiar to industry, that negates almost all the above discussion. This type—the specifications ad—startles the inexperienced:

New MAGNETOHYDRODYNAMIC TRANSDUCER WITH 100% HYSTERESIS!

(GENERALLY A PHOTO WILL BE CENTERED HERE)

Sands Series 100 Magnetohydrodynamic Pressure-Temperature Transducers are for applications of measurement in controlled fusion reactions.

Temperature range	0-20,000,000 C
Pressure range	1-1,000,000,000 psia
Linearity	10^{-10}% of pressure span or less
Hysteresis	100% of pressure span
Input	115 vac, 400 cps
Maximum current rating	0.0003 ma
Nominal resistance	150,000 ohms at 7,583,291 C
Accuracy	Within 0.1 C
Pressure medium	Highly corrosive monatomic gases
Other environments	Meets MIL-E-5272A
Volume of pressure inlet	0.01 cubic inch
Electrical connection	2-ft. cable ending in a Rifle XL-14 plug
Weight	0.5 lb.

SANDS (Such *and* Such) Corporation—builders of the best.

This spec ad might also startle experienced engineers, for reasons outside this discussion. However, the nontechnical advertising man would object to the layout; no one would want to read the ad, cramped as it is, crammed full of figures as it is. Yet, the spec ad is the one outstanding exception to the rules; engineers have been known to fall in ecstasy at the sight. For the creative copywriter, this is a problem of who is doing what with which to whom. No problem, really—the ad gives a condensed engineer's-eye view of the product.

The technical or industrial motion picture probably is at once the newest and oldest phase of communication. In a sense, those high-school science films, dating from the Year 1, were "technical communication." The general approach was the same into World War II—ask any GI about army training films.

The oldies were flat, vapid, and boring. It would be interesting to know how many eager students had curiosity dulled by pictures demonstrating muscle fatigue, cell division, or hygiene.

The films did not live; they were treatments of pompousness that forbade humor and sparkle and interest.

Then came the revolution. Professionals and amateurs-turning-professional took stock, lent a hand, and gave impetus to the new look. Today, good technical movies are increasingly in demand. Technical reports, training, employment recruiting, and sales

are within the scope of motion pictures.

The reason for this "sudden" popularity is quite simple: the motion picture *properly made and used* is the most effective means of mass communication available.

Perhaps Hollywood should borrow the idea back. I use "borrow" because modern industrial movies are based on methods evolved by Hollywood. These methods are also known to the home-movie addict, the one who has gone beyond the state of twenty-two jerky feet of visiting relatives.

The secret? Laughably easy:

1. The report, story, or sales pitch is told by *pictures* and not titles or talk.

2. Each scene of a motion picture should have *motion.*

3. The picture must be organized along the classic lines of writing or speech; there is an introduction, a body, and a summary.

4. Fullest advantage is taken of techniques that are available only to the camera—animation, camera shots, camera angles, fades, cuts, and on into the night.

Laughably easy: but just try it!

If any one branch of technical communication may be considered "major," it is technical writing. Already split into large subbranches, it appears to be growing indefinitely. Until the mid-'40s, tech writing as such didn't exist. Instructions for operating instruments, handbooks, technical proposals, and similar items were all left to anyone silly enough to "volunteer" for the job.

The old jokes about simplicity of putting together a piece of equipment have a great deal of validity and underlying, justifiable pique. Your neighbor, for instance, has just received several large cardboard cartons —the backyard swing set he bought for the kids. He reads the single-page instructions for assembling, scratches his head, rereads, tosses the sheet away in disgust, and simply does what comes naturally. This is all right for a swing set; it gets pretty sticky when a one thousand or ten thousand dollar instrument it at stake. However, the rite of tossing out the instructions was commonplace at one time.

Fortunately, the armed services' and industry's growing awareness of the problem combined to insist that material should be understood as well as read; and tech writing came into existence. Missile-like, it moved slowly but steadily into the '50s, and then rapidly picked up speed and personnel. However, even the first stage hasn't yet burned out.

There was no sudden bursting of the barriers: technical writers had to have full knowledge of the field in which they wrote. Although generally true today, the rule is far from rigid. The factors required are intelligence, some scientific background, knowledge of the American-English language, and enough flexibility to land on all four paws.

Industry began with impossible requirements: a tech writer must be an

engineer—with, say, ten or twenty years' experience—who would work for two hundred fifty dollars a month. The writing was unimportant; it could always be learned.

There were surprises in store. Engineers had the peculiar failing of wanting to keep themselves and their families alive; salaries doubled and trebled. Still, with increased salaries, the men weren't happy, for engineers with the necessary experience wanted to *stay* engineers. So the new graduates were given the pitch. It worked for a time.

Industry then began complaining that ninety per cent of the graduate engineers were too lazy to write properly, too lazy to speak properly, and too uniformly lacking in the desire to learn.

This is not to be construed as an attack on the American school system or engineers. Some of my best friends are engineers who have attended school. From years of association, I have learned never to underestimate the power of the engineer; therefore, I suspect the young ones were not too lazy—they simply wanted to be engineers.

However, it is true that engineering curriculums are short on English courses; one large missile company in southern California holds classes in the basics of the language for incoming engineers. And slowly, industry has come to recognize that writing ability takes time to develop.[2]

This recognition has worked to the advantage of science-fiction writers, particularly in southern California. The recognition has also worked to the advantage of those persons having the requirements already outlined.

This example, exaggerated over the industry mean, will illustrate the point. Recently, an electronics firm in Pasadena had a staff of five editor-writers, headed by a graduate engineer. Of the five, two were graduates in English, one in geology, and one in mathematics. Three of the six total were s-f writers, and one other had appeared in the slicks with fair regularity.

It would be difficult to survey all mechanics of technical writing—this is, after all, an article and not an instruction manual—but some of the basic concepts can be discussed.

Clarity is the prime consideration. Ideas must be expressed so that a reader can understand as painlessly as possible. Therefore, at times, "bad" grammar and long sentences are permissible. Brevity is desirable and necessary; a busy man would rather read five words than ten.

Any working writer, technical or otherwise, knows the value of this oldy: *ex*press, don't *im*press. It's surprising how many people fall into the

[2] It is also easier to put engineering into writers than writing into engineers—easier and cheaper! Writers, of course, are as lazy as engineers; however, if a writer is willing to learn a little about terminology and a lot about the tech-writing system, he can find a job doing what he almost likes. It is also interesting that the writer's rejection slips don't sting as much nor are they as frequent. Among many, one writer—this one—found that tech writing improved his narrative writing; the rejection-slip-per-manuscript-pound factor dropped greatly.

trap and confuse good writing with impressive vocabulary. Concomitantly, the artifice or strategem is one that the technical writer strives assiduously to avoid.

Keeping the above points in mind, read the following quotation from the pen of an engineer:

"Each cabinet will be provided with casters so that it can be placed in ready proximity to the test article with little difficulty."

You may have to read it once or twice; the editor who worked on it certainly did. He finally changed it to:

"Each cabinet, with casters, can be easily placed near the test article."

Here is another bit of deathless prose. This is from a book of operating instructions, and went to the customer as quoted below; only the names are deleted to protect the innocent:

"The electrical connections are made through an integral cable terminating in a ———— Electric Co. connector which plugs into the electrical equipment, such as —— Type XX-XXOO or XX-YYOO series phase shift oscillators or equivalent. The integral cable is held to the pickup and occasionally thereafter, to note if there is sufficient claming force to prevent the cable from being pulled out or twisted. If the cable works loose it may allow moisture to enter the wire cavity."

No comment is possible except to assure you that physics has not recognized a new force; there is no International Standard Clam established as a primary against which other clams are calibrated. The mere existence of such a paragraph, however, is justification enough for the technical middleman—who will spot a minimum of seven "errors" (excluding typo).

The tech writer must put first things first, and each sentence is written with the primary thought at the beginning.

A motto the tech writer holds dear —"Cacography Did Cheap"—is viewed with a jaundiced eye by the narrative writer, particularly when the latter undertakes the tough job of learning technical communication. Everything seems wrong until the insight comes; sometimes it hits him in the middle of a nontechnical proposal; sometimes it wakes him: tech writing, as any other form of writing, takes the basic tools, refines them, condenses them, and then recondenses before the specialized purpose is met.

In order to illustrate concretely, due to the fact that the topic is among the tech writer's first kindergarten lessons, we should discuss unnecessary words —and we can begin with this paragraph's lead sentence. A simple, clear style is vital; superfluous words obscure ideas, waste time, and rob statements of force and effectiveness. Today's writer for *any* market should use "in order" sparingly, if at all, before an infinitive. The ghastly phrase "due to the fact that" is quickly and easily replaced by "because." There are many superfluous words and phrases that the tech writer soon learns to avoid automatically, with only a slight shudder.

"Watch your grammar" is another little motto the industrial writer lives by. He worries, often with good cause, about the indefinite pronoun whose meaning is vague or confusing. "The valve was connected to the pressure line, but it was found to be defective." Was the valve or the pressure line defective? Indefinite pronouns as in the above example might cause an editor to conclude that the engineer (who did the rough draft) was defective—mentally defective. A suggested revision is: "The valve, connected to the pressure line, was defective."

Order of sentence elements is an important concept. It's simple to say the operators (elements) should be kept near the words operated on; and it's easy to see that something is wrong when "the test article" is equipped with a "little difficulty." However, sometimes things slip through, things not always in the sciences.

Here's a very old example from the Boston *Globe*: ". . . Chandler opened a hearing on charges that manager Leo Durocher . . . kicked a fan at the Polo Grounds a half hour ahead of schedule today." Inference: big-league ball clubs try to do *everything* on schedule. Suggested revision: kick the umpire instead; he's strictly from myopiasville.

"Dangling modifier" is the general name tech writing gives to the dangling phrases you learned in school to avoid. Participles, infinitives, and gerunds are almost invariably dangled by nonwriters—and the phrases can cost money. Some danglers are hard to spot, especially when a deadline looms. Naturally, this is obvious: "While receiving, the football hit the end's shoulder." But, suppose toward the end of the working day—that includes writing, editing, fighting off fourteen engineers who want finished books from the roughs they turned in that morning, placating management because the six month job they ordered last week isn't done yet, pleading with graphic art for those discriminator drawings, and groveling before photography for component-identification shots—suppose then the tech writer gets this:

> "I.G. MonDowso Chemical Corp. today opened, in an impressive ceremony, the world's first medium-scale plant for making 2-hydrogen oxide, a compound found useful in all aspects of industry. Often in critically short supply, MonDowso engineers have been at work on the problems connected with 2-hydrogen oxide production for years."

It is quite probable that the writer would miss the fact that it would be wonderful to be a MonDowso engineer—they're in such critically short supply.

Punctuation generally follows accepted rules; there are, of course, specialized uses for each of the marks. The hyphen causes trouble. Most engineers don't understand the hyphen and tend to omit it; most inexperienced tech writers understand so well that they go hyphen-happy. The fol-

lowing phrase and corrections are from a true-life drama:

(engineering rough draft)

". . . reference quantity roughness amplitude-dependent quantity roughness amplitude ratio."

Comment: he *did* manage to get a hyphen in, exactly where a dash should be!

(new tech writer's correction)

". . . reference-quantity-roughness-amplitude — dependent-quantity-roughness-amplitude ratio."

Comment: improved, but the normal reader will wrestle with it.

(the Master Hand)

". . . ratio of reference-quantity roughness amplitude to dependent-quantity roughness amplitude."

Comment: it's still lousy!

Abbreviations are recognized short forms of word expressions. The joker is in "recognized," and abbreviations can cause a hotter argument than any other particular in technical writing. The tech writer prefers not to use abbreviations at all unless they are more familiar than the words for which they stand (e.g., vs. TV).

But when he does use them, the technical writer insists there is no reason to make an abbreviation plural or to end it with a period unless it spells a word or ends a sentence. So, if you went to the supermarket for 15 lbs. of potatoes, the tech writer would buy 15 lb, and beat you home by two characters. Things haven't changed too much: 12 in. equals 1 ft, English measure.

Another example, of many, is the way various temperature systems are abbreviated. "Water boils at 212°F" may be true, but not to the tech writer. His standards say F is the abbreviation for *degree(s)* Fahrenheit, and the little degree mark is dropped out. Similarly, in other temperature scales, C, K, and R mean degree(s) Centigrade, degree(s) Kelvin, and degree(s) Rankine. The reader who asks about degrees Reaumur will be shot on sight!

Abbreviations may be arbitrarily created, especially for long reports; unofficial abbreviations common in the writer's branch of the industry may also be used. The full name is given when first used, and the abbreviation follows in parantheses. The missile industry has coined a name for liquid oxygen, but to scientists outside that industry, the name might (and does) have another meaning. The following examples are germane:

"liquid oxygen (LOX)"

"British-American Geological-Ecologic Laboratory Studies (BAGELS)"

Subsequent usage will be satisfied with LOX and BAGELS.

Now that you are grounded in the principles of technical writing, you might find the following test interesting. The ten questions were selected from a group of thirty-five given to eager, new tech writers. Knowledge of the sciences is unnecessary; common sense is!

Correct these sentences:

1. In the case of circular flight, a constant bank angle is desired.
2. Although these valves are now being employed, they are not sat-

isfactory due to the fact that their response time is too slow.

3. Oscillators are made in various sizes, weights, colors, and with three inputs.
4. By specifying standard resistors, the cost of the chassis can be reduced.
5. About 450°C, the silver content was found not to be constant as was expected.
6. It is possible to completely rewire this circuit without removing the engine from the stand.
7. Inclement weather will not effect the results of the test.
8. As the rate of current change increases the slope of the portions representing the drops will increase.
9. . . . as given for the adiabatic no shaft work constant gravitation potential system.
10. The output amplifier will consist of a phase inverter to drive the output pair of tubes the output pair with cathode resistors to form a voltage proportional to load current circuits which are the analogue of the deflection coil and inverter to invert one of the analogue outputs and a mixer to add the resulting two signals whose sum will be compared with the input. (Yes, it's real. Sometimes the Ph.D.'s get carried away.)

These sentences, with few changes, had to be faced by working tech writers. In reading the answers, remember that *concept* is most important. Perhaps you've found a better way of answering:

1. "A constant bank angle is desired in circular flight." Put first things first.
2. "The valves now used are unsatisfactory because their response time is too slow." Cacography Did Cheap!
3. "Oscillators are made in various sizes, weights, *and* colors, and with three inputs." The bastard enumeration has been made legitimate by addition of "and."
4. "The cost of equipment can be reduced if standard resistors are specified." Cost doesn't specify not no-how; in the original, the sentence was a dangler.
5. "The silver content was found not to be constant above 450 C, as was expected." This one was loaded—the degree mark should have been deleted, true. Most important: the sentence was ambiguous. Was the silver content expected to be not constant at any temperature? Or was it variable only when the compound was above the specified temperature?
6. "It is possible to rewire completely . . ." Tech writing does not split infinitives—unless it's necessary. However, on the subject of split infinitives, you are urged to check Fowler (1) or Nicholson (2). The sentence could have been recast to "This circuit can be rewired completely . . ."
7. "Inclement weather will not *affect* . . ."

8. "As the rate-of-current change increases, the slope of the portions . . ." The compound adjective modifies "change" in an introductory adverbial clause.
9. ". . . as given for the adiabatic, no-shaft-work, constant-gravitation-potential system." This is a series of modifiers, and the compounds are hyphenated and set off by commas. If you recognized the problem, count your answer as correct, even if the commas and hyphens aren't properly placed.
10. You figure this one—I've been trying for years. (Incidentally, the preferred spelling is "analog.")

The engineer will answer correctly two or three of these questions. (With good cause: he's busy building the rocket to the moon rather than writing about it.) The new tech writer will answer four to six questions. If you, as a reader, had six or more "right" answers, you are a tech writer, a liar, or both. On the slight chance I'm wrong, drop around for lunch some time. Our bear trap—rather, our personnel department is just down the hall.

This frustatingly brief review of technical communication has omitted far too much. Public relations, advertising, motion pictures, and writing are all highly dependent on art and photography; yet these last two subjects have been given only passing mention. Description is fine in its place, but the working methods of each division of technical communication have been skipped over. The purpose of this article is to give information about a service "industry" that, outside its doors, is largely unknown.

Most of us in technical communication are mild fanatics. We hope to cut the verbal and written red tape that strangles every human being, making him a prisoner in mental solitary. We refuse to wait for enough telepaths to mutate; we're impatient. We're dogmatic, and our minds are closed—until you suggest a better standard abbreviation or a more efficient visual presentation of tables. We want out—not just to the moon or the stars. We want out of ourselves because once we have that, we'll no longer want the stars; we'll *have* them.

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THE END

Illustrated by Bernklau

THE BIG FIX

BY GEORGE O. SMITH

Anyone who holds that telepathy and psi powers would mean an end to crime quite obviously underestimates the ingenuity of the human race. Now consider a horserace that* had *to be fixed...

IT WAS April, a couple of weeks before the Derby. We were playing poker, which is a game of skill that has nothing to do with the velocity of horse meat.

Phil Howland kept slipping open but he managed to close up before I could tell whether the combination of Three-Five-Two-Four meant a full house of fives over fours or whether he was betting on an open-ended straight that he hadn't bothered to arrange in order as he held them. The Greek was impenetrable; he also blocked me from reading the deck so that I could estimate his hand from the cards that weren't dealt out. Chicago Charlie's mind was easy to read but no one could trust him. He was just as apt to think high to score someone out as he was to think low to suck the boys in. As for me, there I was, good old Wally Wilson, holding a pat straight flush from the eight to the queen of diamonds. I was thinking "full house" but I was betting like a weak three of a kind.

It was a terrific game. Between trying to read into these other guy's brains and keeping them from opening mine, and blocking the Greek's sly stunt of tipping over the poker chips as a distraction, I was also concerned about the eight thousand bucks that was in the pot. The trouble was that all four of us fully intended to rake it in. My straight flush would be good for the works in any normal game with wild cards, but the way this bunch was betting I couldn't be sure. Phil Howland didn't have much of a shield but he could really read, and if he read me—either my mind or my hand—he'd automatically radiate and that would be that.

I was about at the point of calling for the draw when the door opened without any knock. It was Tomboy Taylor. We'd been so engrossed with one another that none of us had caught her approach.

The Greek looked up at her and swore something that he hadn't read in Plato. "Showdown," he said, tossing in his hand.

I grunted and spread my five beauties.

Phil growled and shoved the pot in my direction, keeping both eyes on Tomboy Taylor.

She was something to keep eyes on, both figuratively and literally. The only thing that kept her from being a thionite dream was the Pittsburgh stogie that she insisted upon smoking, and the only thing that kept her from being some man's companion in spite of the stogie was the fact that he'd have to keep his mouth shut or she'd steal his back teeth—if not for fillings, then for practice.

"You, Wally Wilson," she said around the cigar, "get these grifters out of here. I got words."

The Greek growled. "Who says?"

"Barcelona says."

I do not have to explain who Barcelona is. All I have to say is that Phil Howland, The Greek, and Chicago Charlie arose without a word and filed out with their minds all held tight behind solid shields.

I said, "What does Barcelona want with me?"

Tomboy Taylor removed the stogie and said evenly, "Barcelona wants to see it Flying Heels, Moonbeam, and Lady Grace next month."

When I got done gulping I said, "You mean Barcelona wants me to fix the Kentucky Derby?"

"Oh no," she replied in a very throaty contralto that went with her figure and her thousand dollars worth of simple skirt and blouse. "You needn't 'Fix' anything. Just be sure that it's Flying Heels, Moonbeam, and Lady Grace in that order. One, two, three. Do I make Barcelona quite clear?"

I said, "Look, Tomboy, neither of them platers can even *run* that far, let alone running ahead."

"Barcelona says they can. And will." She leaned forward and stubbed out the Pittsburgh stogie and in the gesture she became wholly beautiful as well as beautifully wholesome. As she leaned toward me she unfogged the lighter surface of her mind and let me dig the faintly-leaking concept that she considered me physically attractive. This did not offend me. To the contrary it pleased my ego mightily until Tomboy Taylor deliberately let the barrier down to let me read the visual impression — which included all of the implications contained in the old cliché: " . . . And don't he look nacheral?"

"How, I asked on the recoil, "can I fix the Derby."

"Barcelona says you know more about the horse racing business than any other big time operator in Chicago," she said smoothly. "Barcelona says that he doesn't know anything about horse racing at all, but he has great faith in your ability. Barcelona says that if anybody can make it Flying Heels, Moonbeam, and Lady Grace, one, two, and three, Wally Wilson is the man who can do it. In fact, Barcelona will be terribly disappointed if you can't."

I eyed her carefully. She was a composed and poised beauty who looked entirely incapable of uttering

such words. I tried to peer into her mind but it was like trying to read the fine print of a telephone directory through a knitted woolen shawl. She smiled at me, her shapely lips curving graciously.

I said, "Barcelona seems to have a lot of confidence in my ability to arrange things."

With those delicate lips still curved sweetly, she said, "Barcelona is willing to bet money on your ability as a manager."

At this point Tomboy Taylor fished another Pittsburgh stogie out of her hundred dollar handbag, bit off the end with a quick nibble of even, pearly-white teeth, and stuffed the cigar in between the arched lips. She scratched a big kitchen match on the seat of her skirt after raising one shapely thigh to stretch the cloth. She puffed the stogie into light and became transformed from a beauty into a hag. My mind swore; it was like painting a mustache on the Mona Lisa.

Out of the corner of her mouth she replied to my unspoken question: "It helps to keep grippers like you at mind's length."

Then she left me alone with my littered card table and the eight thousand buck final pot — *and* the unhappy recollection that Barcelona had gotten upset at something Harold Grimmer had done, and he'd gone into Grimmer's place and busted Grimmer flat by starting with one lousy buck and letting it ride through eighteen straight passes. This feat of skill was performed under the mental noses of about eight operators trained to exert their extrasensory talents toward the defeat of sharpshooters who tried to add paraphysics to the laws of chance.

Lieutenant Delancey of the Chicago police came in an hour later. He refused my offer of a drink, and a smoke, and then because I didn't wave him to a chair he crossed my living room briskly and eased himself into my favorite chair. I think I could have won the waiting game but the prize wasn't good enough to interest me in playing. So I said, "O.K., lieutenant, what am I supposed to be guilty of?"

His smile was veiled. "You're not guilty of anything, so far as I know."

"You're not here to pass the time of day."

"No, I'm not. I want information."

"What kind of information?"

"One hears things," he said vaguely.

"Lieutenant," I said, "you've been watching one of those halluscene whodunit dramas where everybody stands around making witty sayings composed of disconnected phrases. You'll next be saying 'Evil Lurks In The Minds Of Men,' in a sepulchral intonation. Let's skip it, huh? What kind of things does one hear and from whom?"

"It starts with Gimpy Gordon."

"Whose mind meanders."

He shrugged. "Gimpy Gordon's meandering mind is well understood for what it is," he said. "But when it ceases to meander long enough to

follow a single train of thought from beginning to logical end, then something is up."

"Such as what, for instance."

The lieutenant leaned back in my easy-chair and stared at the ceiling. "Wally," he said, "I was relaxing in the car with Sergeant Holliday driving. We passed a certain area on Michigan near Randolph and I caught the strong mental impression of someone who—in this day and age, mind you—had had the temerity to pickpocket a wallet containing twenty-seven dollars. The sum of twenty-seven dollars was connected with the fact that the rewards made the risk worth taking; there were distinct impressions of playing that twenty-seven bucks across the board on three very especial nags at the Derby. The impression of the twenty-seven bucks changed into a mental vision of a hand holding a sack of peanuts. There was indecision. Should he take more risk and run up his available cash to make a larger killing, or would one Joseph Barcelona take a stand-offish attitude if some outsider were to lower the track odds by betting a bundle on Flying Heels, Moonbeam, and Lady Grace."

I said, "Lieutenant, you've a pickpocket to jug. Horse betting is legal."

"Since wagering on the speed of a horse has been redefined as 'The purchase of one corporate share to be valid for one transaction only and redeemable at a par value to be established by the outcome of this aforesaid single transaction,' horse betting is legal. This makes you an 'Investment Counselor, short-term transactions only,' and removes from you the odious nomenclature of 'Bookie.' However, permit me to point out that the buying and selling of shares of horseflesh does not grant a license to manipulate the outcome."

"You sound as though you're accusing me of contemplating a fix."

"Oh no. Not that."

"Then what?"

"Wally, Flying Heels, Moonbeam, and Lady Grace were refused by the National Association Of Dog Food Canners because of their substandard health. If I'm not mistaken, the Derby Association should have to run the race early that Saturday afternoon."

"Early?"

"Uh-huh. Early. Y'see, Wally, the blue laws of the blue grass state make it illegal to run horseraces on Sunday, hence the start of the Derby must be early enough to let our three platers complete the race before midnight."

"Lieutenant, there still stands a mathematical probability that—"

"That the rest of the field will catch the Martian Glanders as they lead our three dogs past the clubhouse turn?"

"Lieutenant, you are wronging me."

"I haven't said a thing."

"Then why have you come here to bedevil me, lieutenant? If Barcelona has ideas of arranging a fix—"

"If Barcelona has such notions, Wally Wilson would know about it."

"Everybody," I said, "entertains notions of cleaning up a bundle by having the hundred-to-one shot come in by a length. Even Barcelona must have wild dreams now and then—"

"Come off it," he snapped. "Something's up and I want to know what's cooking."

"Lieutenant, you're now asking me to describe to you how someone might rig the Kentucky Derby in a world full of expert telepaths and perceptives and manipulators, a large number of which will be rather well-paid to lend their extrasensory power to the process of keeping the Derby pure."

He eyed me sourly. "Remember, 'Fireman' O'Leary?"

"That's an unfair allegation," I replied. "The rumor that he started the Chicago Fire is absolutely unfounded."

"As I recall, 'Fireman' O'Leary came by his nickname about one hundred years after the holocaust that started on DeKoven Street in 1871. It seems that 'Fireman' O'Leary was most useful in helping the fillies home at Washington Park by assaulting them in the region of the bangtail with small bollops of pure incandescence. He was a pyrotic."

"That is a false accusation—"

"It was never proved," admitted the lieutenant, "because any one who accused anybody of making use of extrasensory faculties in 1971 would have been tossed into that establishment out on Narragansett Avenue where the headshrinkers once plied their mystic trade. Things are different now."

"Indeed they are, Wally. Which is why I'm here. No one but a fumbling idiot would try anything as crude as speeding a dog over the line by pyrotics or by jolting the animals with a bolt of electrical energy."

"So—?"

"So considering the sad and sorry fact that human nature does not change very much despite the vast possibility for improvement, we must anticipate a fix that has been contrived and executed on a level that takes full cognizance of the widespread presence of psi-function."

"But again, why me?"

"Was not 'Fireman' O'Leary an ancestor of yours?"

"He was my maternal grandparent."

"And so you do indeed come from a long line of horse operators, don't you?"

"I resent your invidious implications."

"And wasn't 'Wireless' Wilson the paternal ancestor from whom the family name has come?"

"I fail to see . . . the allegation that my father's father employed telepathy to transmit track information faster than the wire services has never been proved."

He smiled knowingly. "Wally," he said slowly, "if you feel that allegations have somehow impugned the pure name of your family, you could apply for a review of their several appearances in court. It's possible that 'Fireman' O'Leary did *not* use his

pyrotic talent to enhance the running speed of some tired old dogs."

"But—"

"So I think we understand one another Wally. There is also reason to believe that psionic talent tends to run in families. You're a psi-man and a good one."

"If I hear of anything—"

"You'll let me know," he said flatly. "And if Flying Heels, Moonbeam, *and-or* Lady Grace even so much as succeed in staying on their feet for the whole race, I'll be back demanding to know how you—Wally Wilson—managed to hold them up!"

After which the good Lieutenant Delancey left me to my thoughts—which were most uncomfortable.

Barcelona had to be kept cheerful. But the dogs he'd picked could only come in first unassisted if they happened to be leading the field that started the *next* race, and even then the post time would have to be delayed to give them a longer head start. That meant that *if* our three platers came awake, *everybody* would be looking for the fix.

Anybody who planned a caper would sure have to plan it well.

Barcelona hadn't planned the fix, he merely stated a firm desire and either Barcelona got what he wanted or I got what I didn't want, and I had to do it real good or Delancey would make it real hot for me.

I was not only being forced to enter a life of crime, I was also being forced to perform cleverly.

It wasn't fair for the law to gang up with the crooks against me.

And so with a mind feeling sort of like the famous sparrow who'd gotten trapped for three hours in a badminton game at Forest Hills, I built a strong highball, and poured it down while my halluscene set was warming up. I needed the highball as well as the relaxation, because I knew that the "Drama" being presented was the hundred and umpty-umpth remake of "Tarzan of the Apes" and for ninety solid minutes I would be swinging through trees without benefit of alcohol. Tarzan, you'll remember, did not learn to smoke and drink until the second book.

The halluscene did relax me and kept my mind from its worry even though the drama was cast for kids and therefore contained a maximum of tree-swinging and ape-gymnastics and a near dearth of Lady Jane's pleasant company. What was irritating was the traces of wrong aroma. If one should not associate the African jungle with the aroma of a cheap bar, one should be forgiven for objecting to Lady Jane with a strong flavor of tobacco and cheap booze on her breath.

And so I awoke with this irritating conflict in my senses to discover that I'd dropped out of my character as Tarzan and my surroundings of the jungle, but I'd somehow brought the stench of cheap liquor and moist cigarettes with me.

There was an occupant in the chair next to mine. He needed a bath and he needed a shave but both would

have been wasted if he couldn't change his clothing, too. His name was Gimpy Gordon.

I said, "Get out!"

He whined, "Mr. Wilson, you just gotta help me."

"How?"

"Fer years," he said, "I been living on peanuts. I been runnin' errands for hard coins. I been—"

"Swiping the take of a Red Cross box," I snapped at him.

"Aw, Mr. Wilson," he whined, "I simply gotta make a stake. I'm a-goin' to send it back when I win."

"Are you going to win?"

"Can't I?"

For a moment I toyed with the idea of being honest with the Gimp. Somehow, someone should tell the duffer that all horse players die broke, or that if he could make a living I'd be out of business.

Gimpy Gordon was one of Life's Unfortunates. If it were to rain gold coins, Gimpy would be out wearing boxing gloves. His mental processes meandered because of too much methyl. His unforunate nickname did not come from the old-fashioned reason that he walked with a limp, but from the even more unfortunate reason that he *thought* with a limp. In his own unhealthy way he was —could we call it "Lucky" by any standard of honesty? In this world full of highly developed psi talent, the Gimp *could* pick a pocket and get away with it because he often literally could not remember where and how he'd acquired the wallet for longer than a half minute. And it was a sort of general unwritten rule that any citizen so utterly befogged as to permit his wealth to be lifted via light fingers should lose it as a lesson!

But then it did indeed occur to me that maybe I could make use of the Gimp.

I said, "What can I do, Gimpy?"

"Mr. Wilson," he pleaded, "is it true that you're workin' for Barcelona?"

"Now, you know I can't answer that."

I could read his mind struggling with this concept. It was sort of like trying to read a deck of Chinese Fortune Cards being shuffled before they're placed in the machine at the Penny Arcade. As the drunk once said after reading the Telephone Directory: "Not much plot, but *egad!* What a cast of characters!" The gist of his mental maundering was a childlike desire to have everything sewed up tight. He wanted to win, to be told that he'd win, and to have all the rules altered ad hoc to assure his winning.

Just where he'd picked up the inside dope that Barcelona favored Flying Heels, Moonbeam, and Lady Grace in the Derby I could not dig out of him. Just how Gimpy had made the association between this clambake and me—good old Wally Wilson—I couldn't dig either. But here he was with his—by now—sixty-five bucks carefully heisted, lifted, pinched and fingered, and by the great Harry, Gimpy was not a-goin' to lay it across the board on

those three rejects from a claiming race unless he had a cast-iron assurance that they'd come in across the board, one, two, and three.

I said slowly, *"If* I were even thinking of working for Mr. Barcelona," I told him, "I would be very careful never, never to mention it, you know."

This bundle of The Awful Truth hit him and began to sink in with the inexorable absorption of water dropping down into a bucket of dry sand. It took some time for the process to climax. Once it reached Home Base it took another period of time for the information to be inspected, sorted out, identified, analyzed, and in a very limited degree, understood.

He looked up at me. "I couldn't cuff a hundred, could I?"

I shook my head. I didn't have to veil my mind because I knew that Gimpy was about as talented a telepath as a tallow candle. Frankly between me and thee, dear reader, I

do not put anybody's bet on the cuff. I do a fair-to-middling brisk trade in booking bets placed and discussed by telepathy, but the ones I accept and pay off on—if they're lucky—are those folks who've been sufficiently foresighted to lay it on the line with a retainer against which their losses can be assessed.

On the other hand I could see in Gimpy's mind the simple logic that told him that as a bookmaker I'd be disinclined to lend him money which he'd use to place with me against a sure-thing long shot. If I were to "Lend" him a century for an on-the-cuff bet on a 100:1 horse, especially one that I knew was sure to come in, I might better simply hand him one hundred times one hundred dollars as a gift. It would save a lot of messy bookkeeping.

So the fact that I wouldn't cuff a bet for Gimpy gave him his own proof that I was confirming the fix.

Then I buttered the process.

"Gimp, do you know another good bookmaker?"

"Sure. But you're the best."

"Know one that'll take a bet from you—one that you don't like?"

"Sure, Mr. Wilson."

"Then," I said hauling a thousand out of my wallet, "Put this on *our horses* for me."

He eyed the grand. "But won't Mr. Barcelona be unhappy? Won't that run down the track odds?"

I laughed. "The whole world knows them dogs as also-rans," I said. "Gimpy, they put long shots like those into races just to clip the suckers who think there is a real hundred-to-one chance that a 100:1 horse will outrun favorites."

"Well, if you say so, Mr. Wilson."

"I say so."

"Thanks. I'll pay it back."

He would. I'd see to that.

Gimpy Gordon scuttled out of my bailiwick almost on a dead run. He was positively radiating merriment and joy and excitement. The note in his hand represented a sum greater than he had ever seen in one piece at any time of his life, and the concept of the riches he would know when they paid off on the Kentucky Derby was vague simply because Gimpy could not grasp the magnitude of such magnificence. Oddly, for some unexpected reason or from some unknown source hidden deep in his past, his mind pronounced it "Darby."

I returned to my African jungle still bored with the lack of anything constructive. I returned at about the point where Tarzan and Jane were going through that silly, "Me Tarzan; You Jane" routine which was even more irritating because the program director or someone had muffed the perfume that the Lady Jane wore. Instead of the wholesome freshness of the free, open air, Jane was wearing a heady, spicy scent engineered to cut its way through the blocking barrier of stale cigar smoke, whisky-laden secondhand air, and a waft of cooking aroma from the kitchen of the standard cosmopolitan bistro.

Worse, it got worse instead of

better. Where a clever effects-director might have started with the heavy sophisticated scent and switched to something lighter and airier as Jane was moved away from civilization, this one had done it backwards for some absolutely ridiculous reason. It finally got strong enough to distract me out of my characterization, and I came back to reality to realize once more that reality had been strong enough to cut into the concentration level of a halluscene. There was strong woman-presence in my room, and as I looked around I found that Tomboy Taylor had come in—just as Gimpy Gordon had—and was sitting in the other halluscene chair. She was probably playing Lady Jane to my Tarzan.

Tomboy Taylor had changed to a short-skirted, low-necked cocktail dress; relaxed with her eyes closed in my halluscene chair she looked lovely. She looked as vulnerable as a soft kitten. Remembering that it's the soft vulnerable ones that claw you if you touch, I refrained.

I went to my little bar and refilled my highball glass because swinging through the jungle makes one thirsty, and while I was pouring I took a sly peek into Tomboy Taylor's mind.

She was not halluscening. She was watching me. And when I made contact with her, she radiated a sort of overall aura of amusement-emotion, covered up her conscious deliberation, and blocked any probing by directing me mentally, "Make it two, Wally."

I built her one, handed it to her, and then said, "Folks these days sure have forgotten how to use doorbells."

"If you don't want people coming in, Wally, you should restrict your mindwarden a little. It's set to admit anybody who does not approach the door with vigorous intent to commit grave physical harm. When the thing radiates 'Come in and relax' is a girl supposed to stand outside twiggling on the doorbell?"

I dropped the subject thinking that maybe I shouldn't have brought it up in the first place. It's one that can't be answered by logic, whereas a firm emotional statement of like or dislike stops all counter-argument and I'd made the mistake of questioning my own judgment.

So I eyed her and said, "Tomboy, you did not come here to indulge in small talk."

"No," she admitted. "I'm here to keep track of you, Wally."

"Oh?"

"Our great and good friend wants me to make notes on how clever you are at arranging things."

"You mean Barcelona sent you."

"That's about it."

I looked at her askance. "And how long are you going to stay?"

She smiled. "Until Flying Heels, Moonbeam, and Lady Grace come across the finish line One, Two, and Three at Churchhill Downs on Derby Day."

I grinned at her. "Considering that trio of turtles, Tomboy, it may be for years and it may be forever."

She held up her glass in a sort of

a toast. "Or," she said, " 'Til death do us part!"

A little bitterly I said, "One might think that Barcelona doesn't trust me."

She replied, "It isn't a matter of trust. Barcelona holds you among his very closest friends. He is well aware of the fact that you would do anything for him, that you prize his friendship so highly yourself that you would go to the most desperate lengths to keep it firm and true. Yet he realizes that the simple desire he has recently expressed does place you in a delicate mental attitude. You are likely to feel that he shouldn't have expressed this desire since you feel obligated to fulfill it. He feels that maybe this obligation to maintain friendship at all costs may cause resentment. Since Barcelona does not want you to resent him, he sent me to be your companion in the hope that I might get some forewarning should your friendship for him begin to weaken."

Just why in this day and age she didn't just come out and say—or think—flatly that she was there to keep me in line, I don't know. But there she was, talking all around the main point and delivering the information by long-winded inference.

Even so, without her Pittsburgh stogy, Tomboy Taylor was a mighty attractive dish, and I knew that she could also be a bright and interesting conversationalist if she wanted to be. Under other circumstances I might have enjoyed the company, but it was no pleasure to know that every grain of her one hundred and fourteen pounds avoirdupois was Barcelona's Personal Property. At that moment I realized that I was not too much concerned with what Barcelona's reaction might be. Instead, I was wishing that things were different so that any activity between us would be for our own personal gain and pleasure rather than the order of or the fight against one Joseph Barcelona. There was one consolation. Tomboy Taylor had not come equipped with a box of Pittsburgh stogies with which to make my appreciation of beauty throw up its lunch.

She said, sweetly, "The better to ensnare you, my dear."

But as she spoke, for just a moment her thick woolly mind shield thinned out enough for me to catch a strange, puzzled grasp for understanding. As if for the first time she had been shown how admiration for physical attractiveness could be both honest and good. That my repugnant attitude over her Pittsburgh stogies was not so much based upon the spoiling of beauty by the addition of ugliness, but the fact that the act itself cheapened her in my eyes.

Then she caught me peeking and clamped down a mind screen that made the old so-called "Iron Curtain" resemble a rusty sieve.

"I'm the one that's supposed to keep track of you, you remember," she said, once more covering up and leaping mentally to the attack.

"I'll remember," I said. "But will you tell me something?"

"Maybe," she said in a veiled attitude.

"Is your boy friend really interested in cleaning up, or is he interested in watching me squirm out of a trap he set for me?"

"In the first place," she said, "I may have been seen in Barcelona's presence but please remember that my association with Mr. Joseph Barcelona has always been strictly on a financial plane. This eliminates the inference contained under the phrase 'Boy Friend.' Check?"

"O.K., Tomboy, if that's the—"

"That's not only the way I want it," she said, "but that's the way it always has been and always will be. Second, I have been getting tired of this nickname 'Tomboy'. If we're going to be racked this close together, you'll grate on my nerves less if you use my right name. It's just plain 'Nora' but I'd like to hear it once in a while."

I nodded soberly. I held out a hand but she put her empty highball glass in it instead of her own little paw. I shrugged and mixed and when I returned and handed it to her I said, "I'll make you a deal. I'll call you 'Nora' just so long as you maintain the manners and attitude of a female, feminine, lady-type woman. I'll treat you like a woman, but you've got to earn it. Is that a deal?"

She looked at me, her expression shy and as defenseless as a bruiser-type caught reading sentimental poetry. I perceived that I had again touched a sensitive spot by demanding that she be more than psysically spectacular. Her defenses went down and I saw that she really did not know the answer to my question. I did. It had to do with something that only the achievement of a God-like state—or extreme old age—would change.

This time it was not so much the answer to why little boys walk high fences in front of little girls. It had much more to do with the result of what happens between little boys when the little girl hides her baseball bat and straightens the seams of her stockings when one certain little boy comes into sight. Joseph Barcelona did not admire my ability. He had, therefore, caused me to back myself into a corner where I'd be taken down a peg, shown-up as a second-rater—with the little girl as a witness.

And why had Barcelona been so brash as to send the little girl into my company in order for her to witness my downfall?

Let me tell you about Joe Barcelona.

Normally honest citizens often complain that Barcelona is living high off'n the hawg instead of slugging it out in residence at Stateville, Joliet, Illinois.

With their straight-line approach to simple logic, these citizens argue that the advent of telepathy should have rendered the falsehood impossible, and that perception should enable anybody with half a talent to uncover hidden evidence. Then since

Mr. Joseph Barcelona is obviously not languishing in jail, it is patent that the police are not making full use of their talented extrasensory operators, nor the evidence thus collected.

And then after having argued thus, our upstanding citizen will fire off a fast thought to his wife and ask her to invite the neighbors over that evening for a game of bridge.

None of these simple-type of logicians seem to be aware of the rules for bridge or poker that were in force prior to extrasensory training courses. Since no one recognized psionics, the rules did not take telepathy, perception, manipulation, into any consideration whatsoever. Psionics hadn't done away with anything including the old shell game. All psionics had done was to make the game of chance into a game of skill, and made the game of skill into a game of talent that required better control and longer training in order to gain full proficiency.

In Barcelona's case, he had achieved his own apparent immunity by surrounding himself with a number of hirelings who drew a handsome salary for sitting around thinking noisy thoughts. Noisy thoughts, jarring thoughts, stunts like the concentration-interrupter of playing the first twenty notes of Brahms' Lullaby in perfect pitch and timing and then playing the twenty-first note in staccato and a half-tone flat. Making mental contact with Barcelona was approximately the analogue of eavesdropping upon the intimate cooing of a lover sweet-talking his lady in the middle of a sawmill working on an order three days late under a high priority and a penalty clause for delayed delivery.

People who wonder how Barcelona can think for himself with all of that terrific mental racket going on do not know that Barcelona is one of those very rare birds who can really concentrate to the whole exclusion of any distraction short of a vigorous threat to his physical well-being.

And so his trick of sending Nora Taylor served a threefold purpose. It indicated his contempt for me. It removed Nora from his zone of interference so that she could really witness firsthand my mental squirmings as I watched my own comeuppance bearing down on me. It also gave him double the telepathic contact with me and my counter-plans —if any.

In the latter, you see, Barcelona's way of collecting outside information was to order a temporary cease-fire of the mental noise barrage and then he'd sally forth like a one-man mental commando raid to make a fast grab for what he wanted. Since the best of telepaths cannot read a man's opinion of prunes when he's thinking of peanuts, it is necessary for someone to be thinking of the subject he wants when he makes his raid. Having two in the know and interested doubled his chance for success.

There was also the possibility that Barcelona might consider his deliberate "Leak" to Gimpy Gordon in-

effective. Most sensible folks are disinclined to treat Gimpy's delusions of grandeur seriously despite the truth of the cliché that states that a one-to-one correspondence does indeed exist between the perception of smoke and the existence of pyrotic activity. Nora Taylor would add some certification to the rumor. One thing simply had to be: There must be no mistake about placing information in Lieutenant Delancey's hands so as to create the other jaw of the pincers that I was going to be forced to close upon myself.

I tried a gentle poke in the general direction of Barcelona and found that the mental noise was too much to stand. I withdrew just a bit and closed down the opening until the racket was no more than a mental rumor, and I waited. I hunched that Barcelona would be curious to know how his contact-girl was making out, and might be holding a cease-fire early in this phase of the operation. I was right.

The noise diminished with the suddenness of turning off a mental switch, and as it stopped I went in and practically popped Barcelona on the noodle with:

"How-de-do, Joseph."

He recoiled at the unexpected thrust, but came back with: "Wally Wilson! Got a minute?"

I looked at the calendar, counted off the days to Derby Day in my mind and told him that I had that long—at the very least and probably much, much longer.

"Thinks you!"

"Methinks," I replied.

"Wally boy," he returned, "you aren't playing this very smart."

"Suppose you tell me how you'd be playing it," I bounced back at him. "Tell you how I have erred?"

He went vague on me. "If I were of a suspicious nature, I would begin to wonder about certain connective events. For instance, let's hypothecate. Let's say that a certain prominent bookmaker had been suspected of planning to put a fix on a certain important horse race, but of course nothing could be proved. Now from another source we suddenly discover strong evidence to suggest that this bookmaker is not accepting wagers on the horses he is backing, but conversely is busy laying wagers on the same nags through the help of a rather inept go-between."

I grunted aloud which caused Nora Taylor to look up in surprise. I was tempted to say it aloud but I did not. I thought:

"In simple terms, Joseph, you are miffed because I will not cover your bets."

"I thought nothing of the sort."

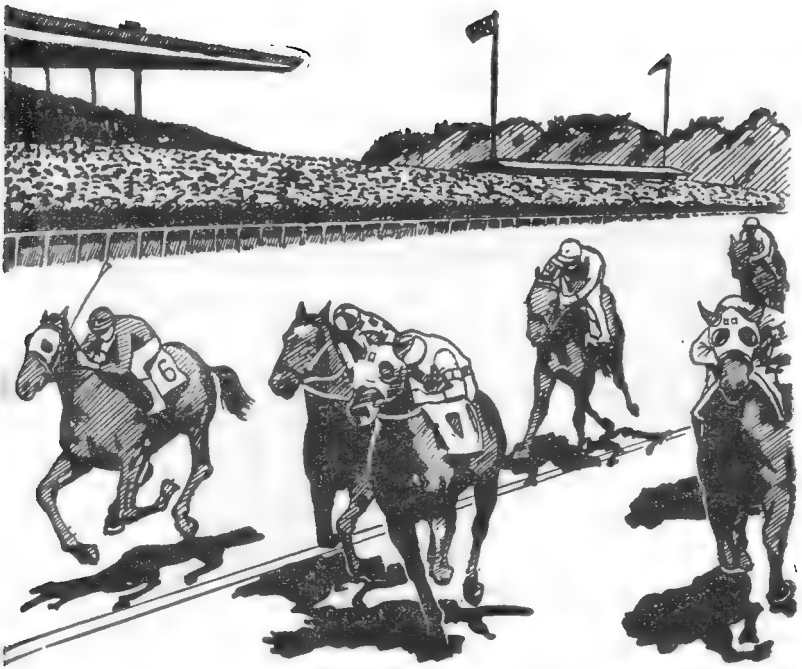
"Let's hedge? I love you too, Joseph."

"Well, are you or aren't you?"

"Are I what? Going to top the frosting by financing your little scheme to put the pinch on me?"

"Now, Wally—"

"Can it, Joseph. We're both big boys now and we both know what the score is. You know and I know that the first time I or one of my boys



takes a bet on any one of the three turtles you like, the guy who laid the bet is going to slip the word to one of your outside men. And you're going to leap to the strange conclusion that if Wally Wilson is accepting bets against his own fix, he must know something exceedingly interesting."

"Now, who's been saying anything about a fix, Wally?"

"The people," I thought bluntly, "who have most recently been associated with your clever kind of operator."

"That isn't very nice, Wally."

If it had been a telephone conversation, I'd have slammed the telephone on him. The mealymouthed louse and his hypocritical gab was making me mad—and I knew that he was making me mad simply to make me lose control of my blanket. I couldn't stop it, so I let my anger out by thinking:

"You think you are clever because you're slipping through sly little loopholes, Joseph. I'm going to show you how neat it is to get everything I want including your grudging admission of defeat by the process of making use of the laws and rules that work in my favor."

"You're a wise guy," he hurled back at me.

"I'm real clever, Barcelona. And

I'm big enough to face you, even though Phil Howland, The Greek, and Chicago Charlie make like cold clams at the mention of your name."

"Why, you punk—"

"Go away, Barcelona. Go away before I make up my mind to make you eat it."

I turned to Nora Taylor and regarded her charms and attractions both physical and mental with open and glowing admiration. It had the precalculated result and it wouldn't have been a whit different if I'd filed a declaration of intent and forced her to read it first.

It even satisfied my ambient curiosity about what a telepathed grinding of the teeth in frustrated anger would transmit as. And when it managed to occur to an unemployed thought-center of my brain that the lines of battle were soft and sweetly curved indeed, Joseph Barcelona couldn't stand it any more. He just gave a mental sigh and signaled for the noisemakers to shut him off from contact.

Derby Day, the First Saturday in May, dawned warm and clear with a fast, dry track forecast for post time. The doorbell woke me up and I dredged my apartment to identify Nora fiddling in my two-bit kitchen with ham and eggs. Outside it was Lieutenant Delancey practising kinematics by pressing the button with a levitated pencil instead of shoving on the thing directly. (I'd changed the combination on the mindwarden at Nora's suggestion.)

As I struggled out of bed, Nora flashed "You get it, Wally," at me. She was busy manipulating the ham slicer and the coffee percolator and floating more eggs from the refrigerator. The invitation and the acceptance for and of breakfast was still floating in the mental atmosphere heavy enough to smell the coffee.

I replied to both of them, "If he can't get in, let him go hungry."

Lieutenant Delancey manipulated the door after I'd reset the mindwarden for him. He came in with a loud verbal greeting that Nora answered by a call from the kitchen. I couldn't hear them because I was in the shower by that time. However, I did ask, "What gives, lieutenant?"

"It's Derby Day."

"Yeah. So what?"

"Going to watch it from here?" he thought incredulously.

"Why not? Be a big jam down there."

"I've a box," he said.

"No . . . how—?"

"Both the Derby Association and the Chicago Police Force have assigned me to protect you from the evil doings of sinners," he said with a chuckle. "And I suggested that the best way of keeping an official eye on you was to visit you at the scene of the alleged intended crime and to serve that end they provided me with a box where we can all be together."

I tossed, "And if we do not elect to go to Kentucky?"

He chuckled again. "Then I shall have to arrest you."

"For what?"

"There is an old law in the City Statute that declares something called 'Massive Cohabitation' to be illegal. You have been naughty, Wally."

Nora exploded. "We have not!" she cried.

Lieutenant Delancey laughed like a stage villian. "The law I mention," he said after a bit of belly-laughing, "was passed long, long ago before telepathy and perception were available to provide the truth. At that time the law took the stand that any unmarried couple living together would take advantage of their unchaperoned freedom, and if this state of cohabitation went on for a considerable length of time—called 'Massive' but don't ask me to justify the term—the probability of their taking pleasure in one another's company approached a one hundred per cent positive probability.

"Now this law was never amended by the Review Act. Hence the fact that you have been chastely occupying separate chambers has nothing to do with the letter of the law that says simply that it is not lawful for an unmarried couple to live under the same unchaperoned roof."

I came out of the shower toweling myself and manipulating a selection of clean clothing out of the closet in my bedroom.

"The law," I observed, "is administered by the *Intent* of the Law, and not by the Letter, isn't it?"

"Oh, sure," he said. "But I'm not qualified to interpret the law. I'll arrest you and bring you to trial and then it's up to some judge to rule upon your purity and innocence of criminal intent, and freedom from moral taint or turpitude. Maybe take weeks, you know."

"And what's the alternative?" I grunted.

"Flight," he said in a sinister tone as I came out of my bedroom putting the last finishes on my necktie. "Flight away from the jurisdiction of the law that proposes to warp the meaning of the law to accomplish its own ends."

"And you?"

"My duty," he grinned, "is to pursue you."

"In which case," observed Nora Taylor, "we might as well fly together and save both time and money."

"That is why I have my personal sky-buggy all ready to go instead of requisitioning an official vehicle," he said. He scooped a fork full of eggs and said, "You're a fool, Wally. The lady can cook."

I chuckled. "And what would happen if I hauled off and married her?"

"You mean right here and now?"

"Yes."

"Sorry. I'd have to restrain you. You see, you couldn't get a legal license nor go through any of the other legal activities, ergo there would be a prima facie illegality about some part of the ceremony. Without being definite as to which phase, I would find it my duty to restrain you from indulging in any act the consummation of which would be illegal."

Nora said in pseudo-petulant tone, "I've been damned with very faint praise."

"How so?"

"Wally Wilson has just said that he'd rather marry me than go to the Kentucky Derby with you."

Lieutenant Delancey said, "I urge you both to come along. You see, my box is also being occupied by an old friend of yours. I managed to talk him into joining us, and with reluctance he consented."

"I'm a mind reader," I said. "Our friend's name is Joseph Barcelona?"

"As they say on the space radio, 'Aye-firm, over and out!' "

Barcelona was there with two of his boys. Watching them were four ununiformed officers. Nora and I and the lieutenant were joined later by Gimpy Gordon, who might have been radiating childlike wonder and a circus-air of excitement at actually being *at* the Derby. He might have been. No one could cut through the constant, maddening mental blah-blah-blah that was being churned out by Barcelona's noisemakers.

He greeted me curtly, eyed Nora hungrily. He said: "You look pretty confident, Wilson."

"I can't lose," I said.

"No? Frankly I don't see how you can win."

I smiled. "Without mentioning any names, Joseph, I feel confident that the final outcome of this racing contest will be just as you want it to be. I shall ask that no credit be given me, although I shall be greatly admired by our mutual friend Miss Nora Taylor who will think that I am truly wonderful for making you happy. And it is more than likely that she may marry me once I have shown you, and she, *and* Lieutenant Delancey, that I am a law-abiding citizen as well as a man who values friendship enough to do as his old pal Joe Barcelona desires."

"It's going to be one of the neatest tricks of the week," he said.

"It will be done by the proper application of laws," I said modestly.

Behind us, Gimpy Gordon light-fingered a half dollar out of Delancey's pocket and was attracting the attention of a hot dog peddler by waving his program. Some folks nearby were eying Barcelona's noisemakers angrily but making very little visible protest once they identified him. Nora was reading her program and underlining some horses. The whole place began to grow into a strange excited silence as the track board began to go up. It was to be a nine-horse race, and at the top of the list were three—count them—three odds-on favorites:

1. Murdoch's Hoard 1:2
2. Mewhu's Jet 3:5
3. Johnny Brack 5:7
4. Piper's Son 8:5
5. Daymare 3:1
6. Helen O'Loy 8:1

And then, of course, there were our three mud turtles which must have been entered by someone who thought that the Kentucky Derby was a claiming race and who hoped that the LePage's Glue people would make a bid for the three mounds of thoroughbred horesflesh that dropped dead in the backstretch:

7. Flying Heels 100:1
8. Moonbeam 250:1
9. Lady Grace 500:1

The rack hadn't hit the top of the slide before there was a sort of mass-movement towards the mutuel windows. The ones who didn't go in person tried to hurl betting-thoughts in the hope of getting there early and failing this they arose and followed the crowd. Slowly the odds began to change; the figures on our three platers began to rise. There was very little activity on the other six horses. Slow-thinking Gimpy Gordon started to get up but I put out a hand to stop him.

"But the odds are dropping," he complained.

"Gimpy," I said, "they pay on the final listing anyway. But would you like a tip?"

"Sure," he said nervously.

"My tip is to keep your cash in your pocket. Put it on the nose of some horse and it's likely to get blown away by a high wind."

The odds were changing rapidly. What with psionic information receivers, trend predictors and estimated anticipators, the mutuel computers kept up with the physical transfer of funds, figured out the latest odds, and flipped the figures as fast as the machinery could work the dials. In no more than a few minutes the odds on the three platers looked more like the odds on horses that stood a chance of winning.

Barcelona looked at me. "What did you do, wise guy?"

"Who . . . me? Why, I didn't do anything that you did not start—except that maybe I was a little more generous."

"Spiel!" he snarled.

"Why, shucks, Joseph. All I did was to slip good old Gimpy Gordon a tip."

"How much?"

"Just a lousy little thousand dollar bill."

"A grand! For what, wise guy?"

"Why, just for telling me what horses you picked for the Derby."

Barcelona looked at the odds on his horses. Flying Heels had passed even money and was heading for a one-to-two odds-on. The other platers were following accordingly.

"And what did you tell Gimpy, Wilson?"

"You tell him, Gimp," I said.

"Why, Wilson just said that we should ride along with you, Mr. Barcelona, because you are such a nice guy that everybody works awfully hard to see that you get what you want."

"There's more!" roared Barcelona.

"Only that I shouldn't mention it to anybody, and that I shouldn't place my bet until the Mutuel windows open because if I did it would louse up the odds and make you unhappy." Gimpy looked at Barcelona's stormy face and he grew frightened. "Honest, Mr. Barcelona, I didn't say a word to nobody. Not a word." He turned to me and whined plaintively, "You tell him, Mr. Wilson. I didn't say a word."

I soothed him. "We know you didn't, Gimpy."

Barcelona exploded. "Ye Gods!" he howled. "They used that gimmick on me when I lost my first baby tooth. 'Don't put your tongue in the vacant place,' they said, 'and don't think of the words *Gold Tooth* and it'll grow in natural gold!' "

As he spoke the odds on Flying Heels changed from a staggering One-to-Eight to an even more staggering One-to-Ten. That meant that anybody holding less than a ten-dollar bet on such a winner would only get his own money back because the track does not insult its clients by weighing them down with coins in the form of small change. They keep the change and call it "Breakage" for any amount over an even-dollar money.

Delancey said to Barcelona, "You have had it, Joseph."

Barcelona snarled, "Put the big arm on Wilson here. He's the fast man with the big fix."

"Wilson didn't fix any race, Joseph. He just parlayed some of the laws of human nature into a win for himself and a lose for you."

"Now see here—what's this guff about human nature?"

"Well, there's the human desire to ride with a winner, and the human frailty that hopes to get something for nothing. To say nothing of the great human desire to be 'On the Inside' track or 'In the Know' so that they can bet on the 'Sure Thing'. And so," said Delancey, "we've about twenty thousand human beings full of human nature holding tickets on your three dogs, Joseph. They bet their money because the 'Inside Dope' said that the big fix was in. And I can tell you that what twenty thousand people are going to do to this 'Inside Dope' when their nags run last is going to make Torquemada ask permission to return to life for a Second Inquisition, this time with extra-sensory tortures." He turned to me as Barcelona went pale. "Wally," he asked, "want to bet that someone doesn't remember that old question of whether it is possible to break every bone in a man's body without killing him?"

"I'd be a fool to cover that one," I said. "But I'll play even money and on either side of whether Joseph dies or lives through the process."

"Stop it!" screamed Barcelona. He grabbed me by the arm. "Wilson," he pleaded, "Can you? Stop it, I mean? Can you fix it?"

"Sure," I said.

"Legally?"

"Yep. But it'll cost you."

"Just money?"

"Just money—and admitting that you lost, Joseph!"

"I lose," he said. "Go ahead!"

"O.K., Joseph. Now, let's be real honest. Those three longshore turtles belong to you, don't they?"

"Yes."

"And right now you wouldn't even want to see them run, would you? In fact, you really want that they shouldn't run."

"Yes."

"All right, Joseph. Call off your noisemakers and toss the Head Stew-

ard a thought. Tell him you're scratching your entries."

"But that won't stop the people from losing their money."

"Natch. So next you broadcast a thought that because of this terrible, grievous error you are refunding their money out of your own pocket since the Track Association will not or is not obliged to."

He turned to his pair of rattleheads and snarled, "All right. Shut up!"

A mental silence fell that was like the peace of rest after a busy day. As Barcelona was tossing his cancellation at the Steward and preparing to make a full and plausible explanation to the gambling instinct of the Kentucky Derby crowd, I considered the matter carefully:

"Let's see," I thought. He wants 'em not to run and so he can't complain to me if they do not. I didn't fix the race, so Lieutenant Delancey can't accuse me of that. That makes everybody happy, and I win!"

A small hand stole into mine. "How about me, Wally?" Nora asked sweetly.

I looked down at a thionite dream come true by the glow in her eyes that admired no one else but me. "You're mine," I reminded her, "until Flying Heels, Moonbeam, and Lady Grace win One, Two, and Three at the Kentucky Derby."

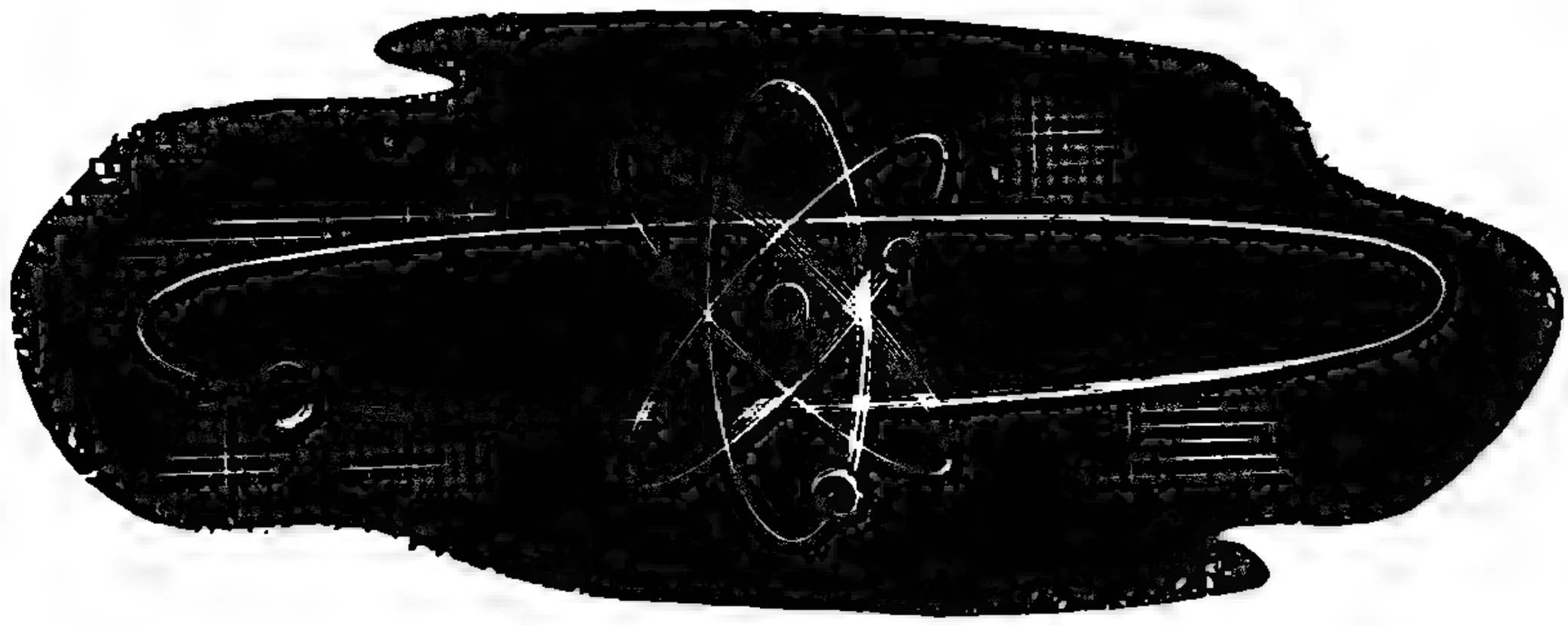
"Or," she said mischieviously, "'Til death do us part!"

I was instructing her how to respond to a kiss as a lady should respond when about two hundred thousand noisy, exuberant human natures yelled and radiated and thought: "They're Off!"

But they didn't mean us. They were watching a bunch of long-faced hayburners chasing one another around a dusty track.

Human nature ain't changed a bit. It's just more complicated in an extrasensory sort of way.

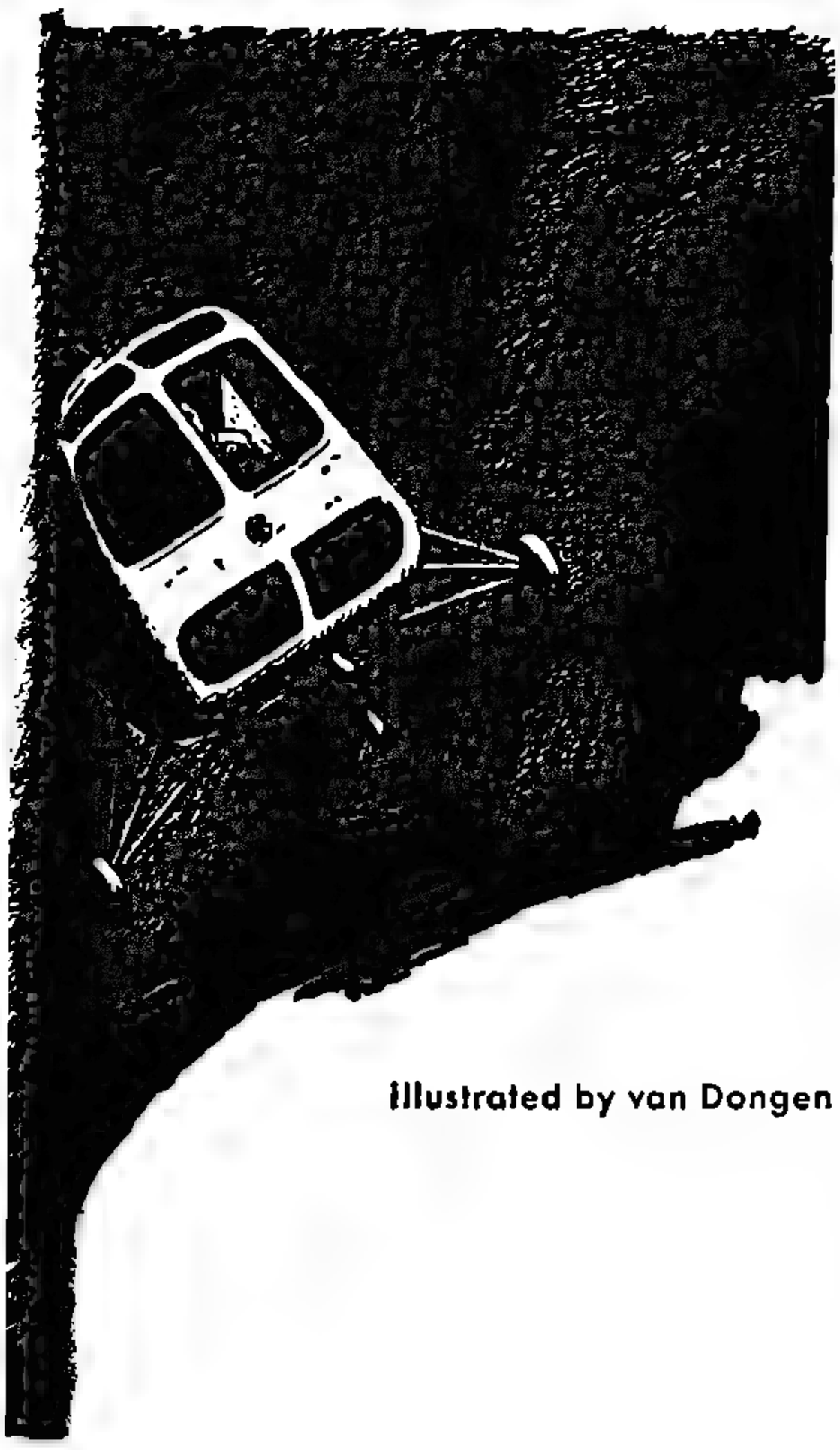
THE END



THE BEST.

BY EVERETT B. COLE

Conclusion. No matter how much a man may help you, the idea of being "eternally grateful" can, in fact, apply only to someone who is safely, eternally dead!



Illustrated by van Dongen

MADE PLANS

SYNOPSIS

As Donald Michaels sits in the school auditorium, he finds himself criticizing the program. A telecast comes on the screen. Daniel Stern, the Prime Minister and Prince Regent of Oredan, is reporting on the destruction of Harle Waern, who had allegedly been a corrupt police official.

In his report, Stern refers to a long flight by Waern, which resulted in twenty deaths and a number of injuries.

The telecast shows Waern's summer home in the foothills, where he is stated to have taken refuge. A group from the Enforcement Corps, supported by mobile artillery, are shown preparing to dislodge him.

As preparations are made for the attack, Don notes evidence of carelessness on the part of the beam-projector crew. They have left themselves open to missile attack. He watches as attempts to talk Waern out of the house fail and the projector blows the house and Waern out of existence.

Don leaves the auditorium and goes to a locker room, his post as a member of the school self-government organization, the Guardians. While he is on post, Gerald and Walter Kelton, aided by Maurie VanSickle, attempt to give Pete Waern a beating.

Don interferes, subduing the three by force of personality. Then, he questions Waern, who is a nephew of the dead police official. Pete Waern states that he has had only one previous meeting with Gerald Kelton, but implies that things like this are likely to happen since his uncle has been killed.

During the conversation, he states that his uncle was an honest police official, framed by the authorities themselves. He also says that his three attackers are members of a juvenile

gang, the Hunters. He implies that the gang has official protection and warns Don that he may have trouble as a result of his interference.

Later, Don's relief advises him that it would be wise to tear up his report slips on the affair. His comment:

"I've known a few guys who crossed the Keltons. Right away, they found themselves all tangled up with the Hunters. Makes things a little rugged, you know?"

Don ignores the advice and turns in a report, charging the three with group assault.

On the following day, he is called in for an interview with Dr. Rayson, the school psychologist. With Rayson is Mr. Masterson, the self-government advisor.

An effort is made by Rayson to persuade Don to change his report. He appears to believe that something resembling hypnosis was used by Pete Waern to get Don completely confused and to generate a false set of memories. He says that therapeutic treatment can correct the matter.

Don rejects the explanation and refuses to alter his report. Masterson who has been making caustic remarks during the interview, then accuses him of accepting a bribe from Pete Waern.

This infuriates Don, who uses his command ability to semiparalyze the two questioners while he gives Masterson a run-down on custom and manners as practiced in the Morek mountain area. He advises him that it is a mortal insult to make a bribery accusation. He also indicates that in his opinion, Masterson himself would be far more susceptible to bribery than he, himself. After disgustedly throwing his self-government button on Masterson's desk, he leaves.

When Rayson and Masterson recover from the paralysis, Masterson announces wrathfully that he'll "turn that kid every way but loose." Rayson, however, explains that it is known that some people can give compulsory commands. He seriously doubts that Masterson could do anything to Don personally, but he adds that such people are regarded as highly dangerous and usually have to be eliminated.

When he picks up his phone to report the matter, Masterson remarks that a person identifying and eliminating such a dangerous character might get preferment. After some discussion, Rayson decides to take care of the matter personally. He leaves Masterson to gather evidence.

Don has gone home. His father takes time out from his rifle practice to listen to his story, then gets Don to try a target himself. When Don fails to make an outstanding score, he remarks about the dangers of getting emotionally upset.

After listening to the story, he explains some of the secret history of the colonization of Oredan to Don.

He explains that the colonization was quite lawless at first, and that the Stellar Guard planted a number of people—some retired, some still on the active list—to clean up the colonization.

He tells Don that these men, of whom he is one, did pacify the border and police the undesirables. But he remarks that they failed in the case of Prime Minister Stern. Stern, he says, got himself into the Oredanian government and, by judicious murder, gained the position of Prime Minister, and then Prince Regent. Also, he says, he has managed to so confuse the royal succession that there is no claimant to the throne who would be likely to be selected by a conclave of the tribes.

"Don't think we didn't try to stop him," he says. "We did. But he's one of those people. If he tells a man to go out and shoot himself, the next thing you hear is the sound of a falling body."

He identifies Masterson as a former Stellar Guard associate who is still on active duty. He advises Don to return to the school at Riandar and work with Masterson, saying that he thinks things are getting ready for a show-down between Stern and the Guardsmen-turned-colonist.

Masterson comments on Kent Michaels' hobby of playing with antique "lead-tossers," then tells Don that he deliberately antagonized him to prevent Rayson from having a chance at getting a statement from Don that Pete Waern had "hypnotized—or whatever you want to call it—him." He says that Rayson is now dead, having crashed in his flier the previous afternoon, and that he was a secret police agent in Stern's service.

Pete (Petoen) Waern, he adds, is a possibility Stern has overlooked until recently. Pete has a definite claim on the royal succession, and now that Stern is aware of it, he is trying to kill him.

He tells Don that he can get Pete and his father, Jasu Waern, to actively oppose Stern, and he tells Don to get the two Waernu to the mountain clans. He promises to alert the Stellar Guard in an effort to force Pete's claim to the throne before a conclave of the tribes of Oredan. Masterson is quite confident of the outcome of such a conclave.

Don follows instructions and takes the Waernu to his father's ranch.

But Masterson is picked up by Stern's police for questioning in the matter of Rayson's crash before he can alert an agent in the office of the Federation Resident Commissioner.

In the meantime, Daniel Stern is endeavoring to work out the elimination of Pete Waern. He is critical of the personnel at Riandar for their handling of the matter. He is irritated at the escape of the Waernu to the Michaels ranch.

He issues instructions to divert a previously planned Enforcement Corps operation to the ranch, instructing his aide to take personal charge of the matter.

"I expect," he says, "to watch a broadcast showing their removal within the next three days."

Stern's associate, Jake Gorham, remarks that Stern should question Masterson personally. This leads to a quarrel which shows Gorham to be the dominant member of a partnership. Stern is worried and uncertain,

but Gorham is confident of the outcome of the affair.

He sums up, saying that they've got Masterson as a prisoner. Kent Michaels has been shot down in the mountains by the border patrol. And Stern's orders will result in the elimination of the only dangerous claimant to the throne. Although Gorham acknowledges everything hasn't gone perfectly, he says that the results are better, since they turned up Masterson and the Michaels family, none of whom had been suspected of being dangerous.

At the Michaels ranch, Don and the Waernu watch the broadcast which is designed to set the stage for their removal. Don recognizes it for what it is, but tells Pete and his father that there are shelters in the basement which are impervious to surface destruction. However, he says, he intends to offer some "real resistance."

He and Pete start down to the rifle range to get weapons.

PART 2

ELL, here they come." Don Michaels looked out of a weapons embrasure.

From the port, the advancing men were far more visible than they intended to be. One after another, they crawled and dashed through the grass, their weapons held before them. They concealed themselves from the house as best they could behind hummocks and clumps of grass. Then, weapons probing toward the house, they waited.

A couple of hundred meters from the house, a weapons carrier purred into position, wheeled to face the house, and stopped, the muted roar of its motor dying to a faint rumble.

Closer to the house, there was a hollow in the earth, a scar from some long-forgotten skirmish. Over the years, rain and wind had worked on it, softening its once harsh outlines. Grass had grown in, to further mask the crater, till now it was a mere smooth depression in the ground. From the edge of this depression, rose the slender rod of a speaker, a small, directional loud-speaker blossoming from it.

Michaels grinned and turned aside for an instant.

"Just like the big broadcasts, Pete," he remarked. "Feel important? You're going to have a big audience."

"Kind of like it better if I were making a personal appearance. Be a lot nicer if I could talk to them—and they could see my face."

"They can't let you do that," Don grinned. "You don't look enough like any of those guys they're supposed to be hunting. Spoil the whole effect that way."

Pete looked at him thoughtfully.

"You know, they always tell people to throw their weapons out and come out with their hands in the air. What would happen if someone took 'em up on it—like the wrong someone—like me, for instance?"

"Good question," Don told him. "Saw a guy come out in one broad-

cast. Someone vaporized him. No way of telling which direction the spray came from, of course. No tracer on the beam." He shrugged.

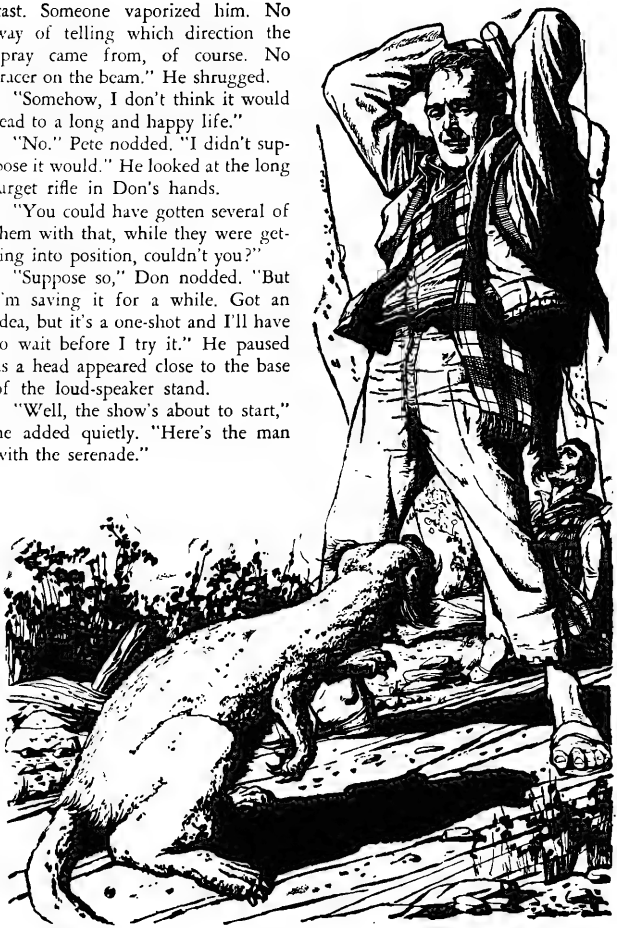
"Somehow, I don't think it would lead to a long and happy life."

"No." Pete nodded. "I didn't suppose it would." He looked at the long target rifle in Don's hands.

"You could have gotten several of them with that, while they were getting into position, couldn't you?"

"Suppose so," Don nodded. "But I'm saving it for a while. Got an idea, but it's a one-shot and I'll have to wait before I try it." He paused as a head appeared close to the base of the loud-speaker stand.

"Well, the show's about to start," he added quietly. "Here's the man with the serenade."



The speaker disintegrated in blazing fury and Pete turned away from the glare, to look back at the house.

"Took your father years to get this place built the way he wanted it," he remarked. "Shame you're going to have to lose it this way." He glanced over at his companion.

Don was stretched out in the prone position, his sling tight on his arm, the rifle extended.

"Yeah," he said. "But maybe we won't lose it—not just yet."

He rolled, forcing his elbow further under the rifle.

"Look, Pete, I think I'll wait till these guys are ready for the last act, but you better go ahead and take cover. They've committed themselves now. I'll duck later, if I have to, but I've got an idea that just might work out."

He laid his cheek against the stock, concentrating on his sights. The barrel moved up and down with his breathing, then stopped.

Pete examined him curiously, then looked out of his port.

The projector barrel was moving, to center its lens on target. As Pete watched, the lens barrel swung till he could see the glint of light on the outer focusing circles. As the rack with its charges started to face him, he moved back, preparing to roll into the narrow slit beneath the wall.

Now, the lens was pointing directly toward him, its iris beginning to widen. He slid off the ledge.

There was a sudden, snapping explosion near him. He looked up, to see the lens system disintegrate. The projector suddenly became a blue glare.

Pete watched as the tiny figures of the crew members flew back from their fiercely glowing weapon.

Abruptly, he realized he was in an exposed position. He ducked sideways, away from the opening, and covered his face.

There was a rumbling multiple explosion. Blinding light reflected from the walls of the house. A few tiles crashed to the court. Pete caught his breath again and risked an upward glance.

A tall pillar of flame had grown from the field outside. For long moments, it stood motionless, searching for a limit to the sky. Then it darkened. Smoke drifted toward the ranch house and bits of wreckage rained down upon house and field alike. Little puffs of smoke appeared in the sky, close by the still rising cloud.

"Pinwheel," said Don calmly. "That's one Dad couldn't beat if he tried. Wish he'd been around to see it." Suddenly, his forced calm deserted him.

"Oh, boy," he yelled happily. "Like shooting snakes in a pit." He shoved his rifle back through the port.

"Try to wreck our house, will you, you bums!"

A figure wobbled up from the field, weapon weaving unsteadily toward the wall. The rifle snapped viciously and the figure melted back into the ground.

There was another motion and a

sudden spurt of dust followed immediately after the sound of a shot. The motion ceased.

The sound of the click of the rifle action was loud against the silence of the scene.

No more figures moved. Bright flames-were-growing — working toward one another, to form a widening lake of flame in the grass. Don sighed and started pulling the sling from his arm. Pete stood up, looking at him.

"I'm a little confused," he said slowly. "I thought that weapon of yours merely threw a solid missile. The way you described it, I thought it was just . . . well, something like a long-range throwing sling."

He looked out the port again, then pointed.

"But that weapons carrier was shielded. I didn't think you could touch one of those with anything but another inductor."

Don leaned the rifle against the wall.

"That's the way they figured it, too," he remarked. "But they forgot something.

"You see, rifles have been obsolete for so long everybody's forgotten their capabilities. Everybody, that is, except a few crazy hobbyists. And no one ever thinks in terms of long-range missile throwers."

"So?"

"So, I've been watching these clay pigeon shoots of theirs for a long time. They've had a lot of them on broadcasts, you know. And I noticed they always operate the same way. Actually . . well, you saw them. They're not too careful." He smiled.

"Remember you remarked that I could have potted a few of them while they were getting into position? Only reason I didn't was that I didn't want to give them a warning." He shoved his hands in his pockets.

"You see, they know they're going to use that projector. The rigged speaker just makes it look good—as though the blast were necessary and unavoidable. That way, the public is convinced that the whole affair is a heroic battle against evil. See what I mean?

"So, they have everything all set up. Safeties are off. Activators are hot. Everything's lined up so they can look sharp. Snappy operation."

He shook his head with a smile. "But actually, they're a little overconfident. Their field screen will stop any heat ray. No khroal charge can get through—it'd get damped. The screen will ground out a Nerne-Herzfeld couple, and no bunch of fugitives is going to be lugging an inductor around with them. So there can't be any counter-battery fire. Result? The projector crew feels perfectly safe."

His smile widened. "But that isn't enough. They want to be comfortable, too. It's hot inside a deflector screen and they'd get their uniforms all sweaty and out of press. Besides, the screen draws a lot of power and they'd have to rev up their motor. The noise would make it rough for the sound crew. Catch?"

Pete moved his head. "I begin to get the idea," he said. "The inductors are real touchy when they're armed. They can arc over and flare back in a real hurry if things get in their fields. That's why the safety lens—and the iris."

"Sure." Don nodded. "Sure it is. And it keeps the beam tube nice and unobstructed. Dry, too. As I said, they're pretty safe. Just like pigeon hunters." He looked out at the field.

"Sort of funny how things can add up," he added. "Here's a guy who makes all sorts of plans. He's got everything figured out and tied up with a ribbon. He's got the whole Galactic Federation standing around, just watching. Not a thing they can do to him legally. And he's got all Oredan in his pocket—all but one family and a few odd yokels he doesn't even worry about. So he's about to fix the family.

"Then someone else starts planning. And some little guy goes and slips a little chunk of fast moving lead down a lens barrel that nobody even thought of protecting. And everything goes wrong. All kinds of things happen. Like investigating patrols ordered in by the Stellar Guard. And conclaves." He grinned and looked at the sky to the west.

"So," he added, "a few little things add up. One family. One little piece of lead. One house that didn't get blown up. One flight of—" He let his voice trail off and looked at his watch.

"Wonder where those patrol ships are. They should be in plain sight by this time, diving down the eastern slope."

He narrowed his eyes, searching the empty western sky.

Pete looked around the courtyard. Broken tiles littered the ground. Here and there, lay bricks and bits of mortar. Some freak of backblast had torn a shutter off the house and it lay brokenly a few feet from him. He looked back toward the house.

One corner of the roof had been shattered and he could see broken roof beams. A cornice from the wall had crashed into the house front and bits of it lay strewn through a gaping hole in the living room wall. Stucco littered the narrow border of shrubbery around the house, whitening the green of the leaves.

And a twisted bit of metal caught his attention. Obviously, it was part of a flier. He shook his head and looked at the sky over the western mountains.

"Quite a blast," he said. "Look, Don, are you sure anything's coming to back us up? A couple more of these and we'll be standing in an open field."

Michaels reached up to stroke his face. "Right now, I'm not too sure about anything," he admitted. "Except that next time they try to comb us over, they'll take a few less chances." He frowned.

"Mr. Masterson was pretty certain about things, but—"

He spun around and walked toward the flier port.

"You know, I think we'd better

play it safe," he went on. "Right now, we've got clear air. That explosion put everything around here on the ground, but hard. But that won't last. Stern's people will be flocking around here in a few minutes to see what went on. We better not be around when they arrive. Go get your father."

He pulled the flier door open.

"I'll have this thing warmed and ready to flit by the time you get back up here. Make it fast, will you?"

Pete had already dived down an escape slot. As Don started through his pre-flight routine, he reappeared. Jasu Waern followed him.

"What happened?" The older man looked around the littered courtyard, then at the flier which Don had pushed out of its cover. His eyes widened.

"But I thought they would use an inductor."

"They tried," Don told him. "Come on. Get in." He looked anxiously at his instrument panel.

"Little risky," he muttered, "taking off so fast. Synchs and generators haven't had time to stabilize. But it beats letting them get in range for some more target practice."

He eased a lever toward him and watched the pointers on a dial as the flier lifted. The red needle started to oscillate and he reached quickly to adjust a knob. The oscillation stopped. He looked overside.

"Hm-m-m," he said, "so far, so good. Well, let's have at it."

He reached out and pulled a handle toward him, watching the needles. They remained steady and he nodded and pulled another control toward him, then gripped the control wheel.

The flier leaped into the air and surged toward the mountains.

Don sighed and made a minute adjustment on the synchro knob.

"Well, we haven't flipped yet," he said. "We'll stay on deck all the way. Not such a good target that way. Take a look back there, Pete. See anything in the air to the east?"

"Yeah." Pete had been looking back. "There's plenty back there. And they're in a hurry."

Don jerked his head around, then glanced at the mountains before them.

"So are we. They built this thing to win races, not lose them. Hope they knew what they were doing." He pulled a panel lever all the way back and the flier surged forward, pressing them back into their seats.

"Hang on," he said. "Some of these corners are going to be tight."

The ship swung into a narrow valley between two hills, bucking and twisting as Don worked the control back and forth. As a high cliff loomed up in front of them, he pulled the flier up, then around in a screaming turn. A second later, they almost touched the tips of trees as they swung around the shoulder of a steep hill. The flier dropped abruptly, seeking the floor of a gorge, then swung violently as it followed a swift flowing stream.

Don guided it into a side gorge, then suddenly pulled up, to jump

through a notch in the surrounding hills. For an instant, the flier paused, hovering in the air over a deep, wide valley, then it dropped like a stooping falcon, sweeping sideways at the end of its drop, to come to rest under an overhanging rock formation. The pilot snapped off switches and leaned back.

"We've got a small-sized walk ahead of us," he said, "but it's through some pretty dense growth and we'll be invisible from the air." He grinned.

"The way I dove into that first canyon, anyone with detectors on me would assume I was heading for the Doer—if he knew the country fairly well. Hope that's the way they know it—just about that well."

He climbed out of the ship, holding the door open.

"Come on, Pete," he ordered, "give me a hand and we'll shove this thing back in the cave so it won't be too easy to spot."

Jasu Waern climbed out after his son.

"I shall help, too," he said resignedly. "Which of the clans do we join?"

Don put a shoulder against the side of the flier. "Kor-en," he said. "I know them pretty well. Matter of fact, the Korenthal wanted to adopt me at one time. Dad talked him out of it."

Waern nodded. "The Kor-en are known to us," he murmured. "Possibly—" He added his weight to the pressure on the flier's side.

They pushed the machine far back into the cavern under the rock, then camouflaged its smooth lines with brush and rubble. Finally, they walked over the rough ground to a nearby thicket. Don paused, looking up. Then he pointed.

"There they are," he said, "in a search pattern. Guess they got a detector flash on us when we jumped the ridge." He shrugged. "Well, they've got a tough hunt now. We'll detour through that line of trees to keep out of the open."

He jerked his head, to point.

"There's a narrow break in the cliffs way over there. When we get through that, we'll come into Korelanni."

Halfway through the narrow crevice, Don stopped and turned aside, to enter a narrow alcove that had been carved out of the rock. Hanging inside was a long tube of wood. Don rubbed his hands vigorously on the moss which grew on the rocks, then stroked the tube.

A tone resonated from the chamber, growing louder as Don continued to stroke the tube. After a few seconds, an answering note of different pitch could be heard. Don nodded and stepped back into the path.

"It's all right," he said. "They'll meet us at the head of the path." He smiled.

"This way, we don't have someone dropping rocks on our heads."

Pete looked up at the towering cliffs which almost joined overhead.

"You mean they've got guards up there?"

"Always," Don told him. "Day and night. Right now, they're at peace with everybody, but they never let their guard down. We'll have a reception committee waiting for us." He started striding up the steep path.

At the head of the chasm, five men waited for them. In their hands, they held sticks about two feet long. At the end of each stick was a thong, with a flexible leather pad which could hold a fair sized stone. Don bowed in the direction of one of the group.

"I know you, Korendwar," he said.

The other bowed. "Michaels," he said. "I know you. And these?"

Don looked at him, his thoughts going into overdrive. The form of address was all wrong. Always before, he had been Donald, of the clan Michaels—they abbreviated it to Michaelsdon. But what had gone wrong now?

He tensed a little, then relaxed. At least, it was a friendly greeting. One does not "know" an enemy. He extended a hand toward Jasu Waern.

"I bring the Waerntal, Jasu. And his son, Waernpeto," he said.

The other nodded. "The men of Kor-en know the Waernu," he said noncommitally. "You want dealings with the Korental?"

Don nodded. "The Waerntal would discuss clan affairs with the Korental," he said. "I but serve as guide."

"It is well. You and this clansman may rest by the wells." Korendwar turned toward Jasu Waern, gesturing with his sling.

"I will conduct you to the Korental, your honor."

Pete leaned against a mossy bank and watched one of the village women as she raised a clay pot from a well.

"Tell me, Don, why did you push my father forward to consult with the Korental? Why didn't you go ahead and deal with him yourself? You said you knew him. Father doesn't."

"That's just the point," smiled Don. "I do know him. And I know his people, and his way of thinking." He waved a hand to indicate the entire collection of huts.

"These people are about as formal as you can get, when business is at hand. Did you notice the way I talked to Korendwar? Migosh, I've hunted with that guy, rolled around in the dirt with him when we were kids, know him about as well as you'd know a brother. But he was on guard. And, friend, you don't get informal with a clansman when he's on guard.

"This is just like a little nation, and the Korental is just as surely a ruler as any king of a huge country," he went on. "Even more so than most."

He fixed his eyes on the council hut, across the narrow end of the valley.

"Everyone in his clan is his child—symbolically, at least. He tells them what to do. He tells them what to plant and when—and how much. He tells them when to hunt, and where. Governs their lives down to some

pretty fine points. I mean, he's as absolute as an absolute monarch can get.

"And if you want to get along with an absolute monarch, you treat him on his terms." He glanced at his companion.

"Oh, I don't mean this guy's a tyrant or despot," he added quickly. "These people are pretty proud. They wouldn't like a dictator—as such. But the Korental doesn't need force to govern his people. They do things his way because . . . well, it's a matter of tradition. It's the only honorable way to do things. See what I mean?"

Pete shook his head doubtfully and Don frowned.

"Pete, your family was originally a mountain clan. I should think you'd know these customs better than I do."

Again, Pete shook his head. "I'm sorry," he said slowly, "but I don't. You see, my father and my uncle thought it would be better if I learned the customs and culture of your people and of the plainsmen. And they thought I should be familiar with the ways of the great cities."

He looked across the village at the great tree which shaded the council hut.

"You see," he continued, "my great uncle was king. And he had no children. He was getting old and it was agreed that if he died childless, his queen would then adopt me. And, of course, I would then be head of the Onaru, and king of Oredan." He smiled wanly.

"The agreement was not made public, of course. And the queen no longer lives. But signatures and agreement are recorded at Oreladar. And they appear in the Book of the Waernu, against my name. References in the Book of the Waernu are so arranged that I may be quickly removed, to be placed in an already prepared place in the Book of the Onaru, if the time should come. This and the fact that my mother was the daughter of a brother of the king, places me in the line of kings of Oredan." He shrugged.

"Especially since the king did, in fact, die childless.

"And this, in my father's eyes, meant that I should know of the plains, of the cities, and of the galactics, since there, he said, lies the power and wealth of the present day Oredan."

Don shrugged. "Wealth, maybe," he said quietly. "I'm not so sure about the power. The pressure of History is a very real thing, and I seem to remember noticing that every time some king has gotten into a jam with one of the other kingdoms or with his own nobles, he's had to raise the clans. And there have been times when that wasn't easy."

Pete nodded. "I know. The Onaru took the throne two hundred years ago, simply because the clans withheld support from the Chalenu—the Old Line."

"Yeah." Don picked idly at the bark of a tree. "And Stern's been trying to get the clans into hot water ever since he took over."

Pete looked at him for a moment, then looked about the village.

There was no orderly arrangement of houses, as could be found in town. Wherever someone had found a suitable spot, there he had embedded his poles. And there, he had erected walls, daubed them with clay from the nearby stream, and formed long, limber wands from the thickets into arched roofs, to be covered with long grass from the valley. There were isolated houses, and there were tight little groups of houses. Possibly, Pete thought, family groups.

No streets existed here, though generations of sandaled feet had beaten the ground into winding paths which led from houses to wells, and from wells to fields, and to the surrounding forest.

And there was no litter, as could be found in any city. No fallen twig or leaf was allowed to remain on the ground of the village. Grass and moss grew on unused ground and on hillsides, but before each hut, the growth gave way to the forecourt and the small garden.

Here and there, a bank by a path had been reinforced with clay cemented stones and over these grew the moss, to soften the hard outlines of the works of man. Here and there, a small, neat pile of material for building lay, to remind the onlooker that this was a still growing community. Pete leaned back.

"It's quite a bit different from the plains," he said, "and not as I thought it would be. I always thought the hillmen were wild and uncultured." He turned toward Don.

"But you still haven't really answered my question. Why is it my father has to talk to the Korental—alone?"

Don lifted a shoulder. "Simple enough," he said. "Your father is the head of your branch of the family right now. It's a pretty small clan branch—just the two of you, but he's the clan head—the Waerntal. Right?"

"I suppose so. Yes." Pete thought a moment. "Actually, I guess he's tal over more than just the two of us. We are the senior line of the family."

"Well, then. This is clan business. Your father wants to advance a member of his clan as a claimant for the throne of Oredan. He needs the support of other clans to do this. And this is important clan business. See?"

Pete rubbed at an ear. "I begin to get the idea, I guess, but it just doesn't make too much sense. He could have you speak for him. Or I could plead my own case, for that matter, couldn't I?"

"Makes all kinds of sense." Don shook his head. "Look, you can't talk to the Korental—not on even terms —not now. You're just a clansman. If he accepts you as king-to-be, then you'll be a sort of super clan head. Then you'll be able to discuss policy with him. But even then, only as an equal—never as a superior. He actually acknowledges no superior." He pointed to himself, pausing.

"Me? Good grief, I'm not even in this. I'm just a hired hand—not even a member of your clan. Before I could open my mouth, I'd have to be adopted into your clan and desig-

nated as a clan councilor. Even then, the tal would have to open the discussion.

"Oh, I can talk to the Korental as an individual who wants to get help from some of his people for a hunt, sure. And we can then arrange an exchange of goods. That's between him and me. But if I tried to talk to him on this affair, he'd throw me out of the village." He rubbed his cheek thoughtfully.

"And, come to think of it, if he thought you'd asked me to intervene, after he'd tossed me out, he'd probably feed you to the Choyneu. That, he'd regard as a selling of honor."

Pete looked at him quizzically. "I can just see him—or any other person, monarch or no—throwing you anywhere you didn't want to go. I'd say the throwing would be the other way."

Don laughed softly. "Oh, that." He shook his head. "Well, let's just say I don't think I'd care to try it

out on a whole clan at once. Things might get a little complicated."

A short, heavily muscled man came out of the council hut. In his hands, he held his slender sling-stick. He paused as he got to the door, then shook out the thong. For a moment, he stood, glancing across the end of the valley, then he wound the thong about the stick, securing it at the end with a half-hitch.

Again, he looked in the direction of Don and Pete. Then he held up the stick and beckoned to them.

Don pushed himself away from the bank.

"Well," he said, "here we go. They've come to some sort of a decision."

They walked through the door of the hut, stopping as they came inside. An old man sat on a hide-covered stool, facing the entrance. Near him stood Jasu Waern. The old man got to his feet.

"Waernpeto?" he asked.

Pete stepped forward and bowed. "I am Peto of the clan Waern," he said.

"It is good." The Korental nodded briefly, then looked at Don.

"And Michaels. I know you," he added.

Don looked at him curiously. There was that odd form of address again. Had he suddenly come to be regarded as clanless? What was this? He bowed.

"I know you, Korental," he said formally.

The old man before him nodded. "We are not now sure how to address you," he explained. "Your father may yet be alive, so we cannot regard you as clan head. But as your father has not been found you may, therefore, be clan head in fact. The men of clan Mal-ka have joined us in searching the gorge of the Gharu, where his flier was shot down. Thus far, nothing has been found. It is a long gorge, and deep."

"Dad?" Don blinked. "Shot down?"

The Korental nodded. "Two days since," he said. "A flier of the Royal Guard fired upon him and his flier weaved and dropped into the gorge. No man saw its landing place." He paused thoughtfully.

"Nor were there flames."

Don glanced about the hut. It was the same place he had come to many times before, when he wanted to get beaters. It was familiar. And yet it was now a place of strangeness. Suddenly, he felt rootless—disassociated from people. He struggled to regain his poise and retain the formal manner expected of him. He managed a bow of acknowledgment.

"I thank the Korental for this information," he said. "I beg permission to await further word under his protection."

Somehow, he couldn't imagine anyone succeeding in shooting his father out of the sky. Kent Michaels had been one of the hottest fighter men in the guard. And even if he hadn't been able to get away from the guy, he'd have taken him down with him.

How . . .? He jerked his attention to the Korental.

The old man had inclined his head. "My clan is yours during this time of trouble," he was saying. He looked toward Pete.

"And you are he who would be King of the Oredanu?"

Pete nodded. "I am."

"I see. Your father tells me of certain agreements made many years ago. He tells me of relationships, and of your possible adoption into another clan. These things are true?"

Again Pete nodded. "These things are true."

The old man considered him for a few seconds.

"Among the men of the hills," he said, "the simple word of a man may be accepted. For only a clanless one would think of speaking other than the truth. But I am told the men of the low countries have no such faith. They require writings, and the speech of many witnesses. This is also true?"

The question was obviously rhetorical. Pete smiled ruefully, but said nothing.

The Korental allowed his lips to curl in a half smile.

"These customs of the plainsmen are not unknown to me," he said. "Men of my clan have gone to the low country and have dealt with the men of the cities. Even now, members of the Kor-en live in the cities. But on the clan days, they return to their home, here in the hills." He looked down at the matting on the floor.

"Your father mentions a clan book," he continued. "Do you have this with you?"

Pete looked at him, then at his father. His expression was suddenly blank.

Jasu Waern stepped forward. "This book is in a safe place," he said, "in Riandar."

Don closed his eyes for an instant. "Oh, Brother," he told himself, "the lights just went out! I'll bet they're tearing that house up, stone by stone, about now."

The Korental nodded slowly. "How safe?"

"Why," Jasu was thoughtful. "Why, the hiding place is known only to me—and to my son." He bent his head, then looked up, smiling confidently. "No, it could never be discovered by an outsider."

"The book must be produced," the Korental told him. He resumed his seat on the stool and folded his hands over a short staff.

"We of the clans would be happy to support a legitimate claimant to the throne of Oredan. We are not happy with the rule of this outlander who has forced himself into power. But we also recognize the rules and the customs of the nobles of the land, who must have proof of everything before they will act. We are not strangers to the conclave, you must remember. And we are familiar with the power of the outlander." He looked at Don.

"Tell me," he said, "do you have an interest in this matter?"

Don nodded. "I am not of the

clan Waern," he said carefully. "But my interests have become tied with theirs. Should the Waernu fail, my father's lands would be lost. And the climate of this land would become unhealthy for me—as well as for my father, if he still lives."

"Yes." The Korental regarded him. "I can understand that. We are not as uncivilized as many think us to be. We watched the broadcast of an attack upon your house." He tilted his head.

"Tell me," he added. "The broadcast ended rather suddenly. The announcer mentioned technical difficulties. Can you explain this?"

Don relaxed. The formal session was over for a while.

"I took a shot at them," he said, "with a Ghar rifle."

"Ha! They do have a weak spot, then. We'll discuss this later." The old man looked at Jasu Waern.

"Let us suppose that this young man should ask to be adopted into your clan. What would your answer be?"

Waern looked confused. "Why—But he's been giving us—"

The Korental chuckled. "I know. He has some of those characteristics attributed by legend to clan talu, and to them only." He bent his head for a moment.

"Suppose I put it this way. When the clans and tribes meet for full consideration of your request for support, you will need strong council. And the councilor who presents your cause must be a member of your clan, of course. He must speak for you, the head of the Waernu."

Waern looked at him. "I see," he said thoughtfully. "And here, we may find strong council." He looked across at Don.

"You would consider this?"

Don paused. This, he thought, was getting serious. It had been fine at first. He had just followed instructions from an experienced agent. And there had been quite a thrill at being in the middle of things. But somehow, everything was flying apart. All at once, he was on his own.

And now—well, clan councilors were pretty responsible individuals. They were supposed to be the experts on law and custom. They were supposed to put things together—and keep them that way. He could remember daydreams he'd had once, of helping run a country. Some of them had been pretty dramatic. But—well, it was beginning to look like real trouble. If things went wrong, a councilor could get his neck on a block for sure.

Then he smiled inwardly. So what of it? How could he get into any more trouble? He already had the entire Enforcement Corps screaming for his blood. He'd killed off a Royal Guard projector crew, an entire Enforcement crew, and a few odd news people. They didn't like him. But they wanted him. The only way out of this one would be straight ahead. He nodded.

"Of course," he said simply.

The Korental came to his feet and grabbed his staff. Beside his stool was

a battered tone tube. He swung the staff at the dented wood and a deep tone followed the sharp crack.

He wheeled upon the man who came through the door.

"Tell the Korensahn to come up here," he ordered. "And have him bring five men with him. We have a clan adoption to witness."

Don flexed his back and hunched his shoulders a little to get the packboard more comfortably settled. The darn things were heavy. He looked at the others, who walked along the road. Hang it, they seemed to swing along under their loads as though they were just taking a short walk before breakfast. He poked at the hard ground with his stick.

How had he managed to haul himself into this one, anyway? Blasted thing had all seemed so logical, back there in Korelanni. He reviewed the steps.

First, it had been essential that the safety and contents of the Book of the Waernu be determined. Without it, Pete's claim would be so vague as to be untenable. Especially before a conclave with the regent in active opposition.

Second, the book would have to be placed in safekeeping where it could be immediately produced upon demand. He frowned. That was a tough one. So anyway—

Then, there had come the question. Who was going to get this book and bring it back—or protect it? Pete was too valuable and too vulnerable. He was known, and if any of the police agencies got their hands on him . . . well, that would be all. So Pete was out.

Jasu Waern? Don grinned to himself. "Skip it," he told himself. He poked at the ground again with the stick. It was getting hot. And he was thirsty.

"Hope that gunk they used to monkey up my complexion doesn't sweat out," he told himself. "That would do it for sure."

He glanced up at the sky. It was getting close to midday. Ahead, he could see a few men sitting at the side of the road, leaning back against their packs. He went forward a few more paces, then selected a comfortable looking bit of moss.

So what had happened? A little guy named Donald Michaels had been disguised as a clanless mat maker. He leaned back against the pack. And, brother, had they given him a stock of mats to sell. This clansman in Riandar would be busy for a month, just unloading all these things from his stock.

He thought of those daydreams he had once had. A king's councilor, he had imagined, was a highly important, greatly respected individual. He had dreamed of himself, dressed in the ornate formal robes he'd seen in pictures of the old nobility. He'd pictured himself exchanging urbane chatter with other beautifully turned out characters, who hung on his every word. He'd seen himself striding between low-bowing lines of assorted courtiers and soldiery, pausing now

and then to tap at the pavement with his jeweled staff. He'd—Hah!

He looked at the dusty trail. He'd been striding, all right, but the field reeds didn't look too much like bowing lines of— Yeah, and his staff didn't have too many jewels, either. No pavement, even, and this fool pack didn't feel much like a finely tailored robe of office. He shrugged.

"This is no dream," he told himself. "You let one of Stern's people get suspicious, and you'll find out just how real things can get." He twisted around to get the package of food and the water bottle which dangled from the pack.

Distastefully, he looked at the little packet of powder which was in the food package. He glanced around quickly, then dumped the powder into his mouth, quickly gulping water to wash it down.

"Gaah!" he growled, "does it have to taste like the inside of an old shoe? Oh, well, it'll keep me nice and dark for the next thirty hours or so." He pulled a strip of dried meat from the package. Maybe this will help take the taste out.

He sighed and worked his jaws on the leatherlike substance. It started to soften a little.

Well, anyway, he knew how to get to the vault where the ancestral volumes of the Waernu were kept. And he knew just which volume to pick out. Only one small problem remained. How was he going to get into the house—and on into the little pond in the inner garden? He grinned as he thought of Pete's remark.

"It'll be simple for you," he had said enviously. "All you have to do is tell any guard you meet to stand aside and forget he ever saw you. Then you go on down to the vault. Wish I had that ability of yours."

"Sure," he told himself, "hang your clothes on yonder bush—and get right into the water. It's just a simple matter of diving down ten feet and pushing the right rock the right number of times—in the right directions. Nothing to it. And then you go through the pressure trap, and there you are. Simple!"

And who was going to guard the pond while he was down there? Suppose he broke surface right in front of a flock of trigger-happy Enforcers? He sighed.

"Oh, well," he told himself. "You asked for it. Now, you've got it. Have fun." He looked into the food package and selected a meal cake.

At last, he dusted his fingers and leaned back lazily against his pack, looking into the clear sky. For a few minutes, he simply relaxed, his eyes fixed on the infinite distance, his mind a near blank.

Other pack-laden men strode past him, intent on their destination. At last, a group swung by and the sound of their conversation brought Don out of his semitrance. Behind the group was another, who walked a little faster than the others, in an apparent effort to catch up. Don pushed himself up with the aid of his staff,

drew a few deep breaths, and started pacing along behind him.

Ahead, the group went around a curve in the path. The man ahead of Don cut over into the grass, still intent on catching up with his companions, who were not more than a few meters ahead. Don watched him casually.

There was no use, he thought, in trying to keep up with this fellow or his companions. It was too hot. Besides, this was probably a clan group who would not welcome company—especially the company of one of no clan.

He started to slow down to a normal pace, then his attention was caught by movement by a rock just ahead of the other. A small, greenish-brown body was vaguely outlined in the long grass nearly in the man's path.

Don looked more closely. The animal was heavy-bodied, with rather short forelegs. Powerful hind legs were tucked under the body, twitching a little now. The forelegs pawed slightly at the grass and the flat, wide head probed out, extending toward the approaching man.

"Hey!" yelled Don. "Look out. Gersal!" He started forward in a half run, his staff poised for a blow.

The other jumped sideways but the furry body grazed his leg and spun, claws and teeth working furiously. The man looked down and screamed.

Don's staff came down in a chopping blow and the animal bounced out onto the open path. Its paws raised little spurts of dust as it spun about and prepared for another spring.

Again, Don's staff swung down. The gersal flopped about for an instant in the dust of the path, then faced toward him, an angry scream coming from its throat.

Again, it tried to get its balance for a spring, but one hind leg dragged limply. Again, the staff swung, tumbling the beast over in the dust.

There was a flurry of paws and the gersal struggled up to its haunches, then sat up, its brilliant red eyes fixed on Don. It stretched out short forelegs in seeming supplication, then batted futilely at the punching staff end.

Disregarding the pleading attitude of the beast, Don continued to punch at the squirming body till it was obvious that no vestige of life could remain. Then, he looked at the other man.

The fellow had managed to get to the center of the path before he had collapsed. He half sat, half lay against his pack, breathing raggedly. Sweat stood out on his forehead. He looked at Don vaguely, making an obvious effort to focus his eyes.

"Thanks . . . Friend," he mumbled. "You tried— Oooh!" He closed his eyes and stiffened, his legs stretching out and his back arching.

The men who walked ahead had been attracted by the commotion. They came back and one jerked off his pack and bent over the man in the path. He looked over at the dead animal, then glanced up at Don.

"How many times was he bitten?"

"I doubt if he got more than one," Don told him.

The other nodded and looked searchingly at the victim. Then, he reached into his clothing and removed a small packet. He opened it and pulled the protective cover off a syrette.

"There's a small chance, then," he remarked. He poked the needle of the syrette into the sufferer's forearm and squeezed the tube.

The stricken man moved convulsively and opened one eye. His companion nodded.

"You might make it, Delm," he said cautiously. "Only one bite, and we got to you soon." He nodded.

"If you can hang on for just five minutes, you'll walk the trail again." He looked up at Don.

"That was quick action," he said. "You may have saved our clan brother." He looked down at the torn place on the man's leg.

"A couple of more bites, and he'd surely be dead by now." He got to his feet.

"Whom do we have to thank?"

Don looked down at the path in apparent discomfort.

"I am Kalo," he said, "of the mountains."

The other's eyes clouded. "Oh," he said tonelessly. He looked down at his companion, then back at the dead animal.

"Well," he said slowly, "we are grateful, Clanless One. Go your way in peace. We will take care of our brother."

Don started to turn away. "I hope he—"

The other nodded curtly. "The gersal's poison is strong," he said. "But soon we shall see. May your way be safe." He turned back to his patient.

Don turned away and went around the curve in the path. Well, maybe the Korental had been right, he thought. So long as they kept from bothering others, the clanless ones weren't molested. And they certainly didn't form any associations that might be embarrassing later on. He glanced back.

"Hope that guy lives through it," he told himself, "but I'm glad I don't have to put up with a three-day celebration. Haven't got the time."

In the distance, he could see the walls and towers of Riandar. The walk was nearly over now. He stepped his pace up a little, then slowed down again. There was no sense in coming through the gate all hot and sweaty, he reminded himself. It would be way out of character.

It was funny, Don thought, that he hadn't remembered this store when the Korental had described its location. Probably it was the use of the word "shop." This was a large department store. He'd done some shopping here at one time or another, himself. He started to go by the front, then a display in one of the windows attracted his attention. He paused.

Someone had designed a tasteful array of furniture, set up like a noble-

man's bedroom suite. One could, without too much effort, imagine himself standing on the enclosed walkway of a palace, facing away from the inner garden. The furniture, he noted, was of excellent quality. In fact, when he started refinishing the ranch, maybe he'd come in here. He glanced at the display floor. The mats were similar in design to those in his pack.

Suddenly, he remembered his own present status and stepped back, away from the window. Simple mat makers don't concern themselves with examining displays that would cost more than they'd make in a lifetime. This window was strictly for people who could afford large platters of luxury. He turned away, looking for another, less elaborate entrance.

Down the street, at the corner of the building, he found an inconspicuous door. A brass plate indicated that this was the employees' entrance to the Blue Mountain Mercantile Company's offices. Another plate indicated that the delivery entrance was around the corner. Don shrugged and went into the door.

He found himself in a narrow hallway. Before him was a stairway, its lowest step blocked by a light chain. To his right, a man sat in a small cubby.

"You're in the wrong door," he said expressionlessly. "Deliveries are received around the corner."

"I know," Don told him. "I'm from the Kor-en. I'd like to see Korentona."

The man frowned fleetingly. "Tell you," he said casually, "maybe it would be better if you made your delivery right now. Then you can come back later on."

Don examined him for a moment. "You mean something is—"

"That's right." The man nodded. "Go around to the receiving room. Drop your pack, and come back—say in about an hour." He glanced upward as footsteps sounded on the stairs.

"Oh, oh," he added softly. "Keep quiet and let me handle this."

A heavy-set man came down the stairs. He looked sharply at Don, taking in his appearance and the details of his pack.

"What's this, Mora?" he demanded.

The timekeeper shrugged casually. "Just some porter," he said negligently. "Can't read too well, I guess. Got in the wrong door. I was telling him where to drop his pack."

"Oh?" The other looked at Don more closely. "Looks like another load of those mats from the Morek. Look, Fellow, you wouldn't be from one of those clans, would you now?"

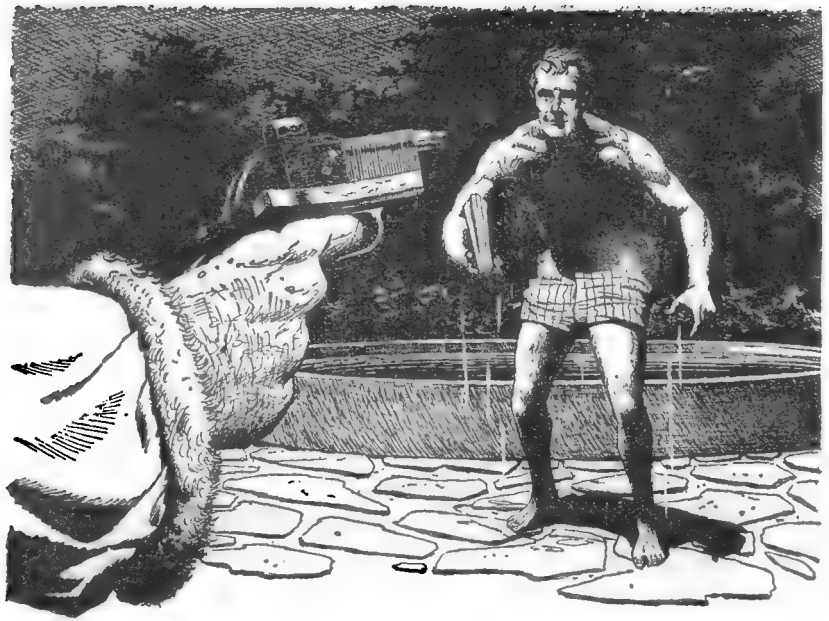
Don shook his head. "I am Kalo," he said, "of the mountains. I have no clan. I make mats. And twice a year I come here to Riandar to sell them."

"Been here before?"

"I have been in Riandar many times."

"That's not what I mean. Have you been here—to this store—before?"

Don shook his head. "Not to this



store, no. But they told me the Blue Mountain was paying better than some others. I thought I'd try—"

"Yeah," the other said coldly. "Sure. Now, suppose we take a little walk, you and I? Some people down the street would like to talk to you."

Don shook his head. "I merely came here to sell mats," he insisted. "I make good mats."

The heavy man frowned. "Maybe," he snapped. "We'll see about that after we've had a talk with you." He stepped closer. "If you're just a mat maker, nothing will happen to you. If you really have good mats, you might even get a nice price for some of your stuff. Come on."

He reached out to take Don's sleeve. Don stepped back, his face suddenly losing its vague, apologetic expression. His features sharpened, to become hard, uncompromising.

"Get over to that wall, Fellow," he ordered sharply. "Move!"

The man's hand dropped. For a moment, he stared slackly at Don.

"Come on!" Don's voice raised a little. "Get over to that wall. And then stand still." He started to shuck off the straps of his pack.

The man before him sobbed helplessly, then shuffled away. Don knelt down and stripped the pack off. Then he stepped aside and raised a hand in a beckoning gesture.

"Now get over here," he snapped. "Pick up that pack and take it up to Mr. Tona's office. I'll follow you."

The man in the cubby rubbed his

head for a moment, then picked up the phone. Don swung toward him.

"Put that phone back," he ordered, "and come out of there. You're coming with us."

Korentona looked up as the small procession entered his office.

"What's happened now?"

Don nodded at him, then faced the man with the pack.

"Put that pack down," he commanded. "Now, stand over there." He pointed. "And be very quiet." He glanced at the doorman.

"You can stay where you are." He looked at Korentona.

"My apologies," he said, "for being so informal. But I come from the Kor-en, and I had a little trouble. There's a message for you in the pack. You know, of course, where to find it. Who are these two?"

Korentona looked worried. "This one," he pointed at the doorman, "is a trusted employee. He's been with me for years."

He paused, looking at the other man. "But this one, I have never trusted. I'm sure he reports to the police."

Don glanced at the doorman. "My apologies," he said. "You are free to go as you will." He looked closely at the other.

"Is this correct?" he demanded. "Are you a police agent?"

The man nodded. "That's right," he said reluctantly. "I'm supposed to watch this place and report on its visitors."

"Here," Don told him, "is one visitor you won't report." He stopped, considering, then impaled the man with a cold stare.

"Have you ever seen a man bitten by a gersal?"

The man shrugged. "Yeah. What about it?"

Don nodded. "You will remember that scene," he said. "Do you remember that man's struggles? Do you remember the animal, chewing at him, injecting its poison? Do you remember this man dropping, first to his knees, then to his back? Do you remember—"

"Hey!" protested the other. His hands came up before his face.

"Put those hands down," snapped Don. "And listen closely. I want you to have full recall on this. You remember this man who was bitten, how he sobbed for breath—how his legs stretched out and his back arched, till the muscles tore from the bones with their effort. You remember all this?"

The man nodded wordlessly, his fascinated stare fixed on Don's face.

"Then I want you to fix this in your mind," Don told him. "Should you be so unwise as to attempt to mention any of these things that have happened since you came down those stairs—should you even allow your memory to dwell on these things for too long—these are the things that will happen to you.

"You will sink to your knees. Your muscles will be unable to support you, and you will fall to your back. You will find it impossible to breathe, for the muscles of your chest will distend

the ribs. And in your struggles, you will break bones. And you will tear your body to bits. Do you understand this?"

The man sagged against the wall, panting. He managed a nod.

"Then forget about this afternoon," commanded Don. "Go about your business in normal fashion. And forget about this afternoon. Nothing happened that was worthy of note." He waved a hand in dismissal, then turned to Korentona.

"I don't want to go into a lot of detail," he said. "As I said, there's a detailed message in the pack. I'll wait for you to read it." He glanced down at his clothing.

"I'd like a place, though, where I can clean up. And I could use some other clothes, if you don't mind."

When he came back to the office, Korentona waved him to a chair.

"So," he said musingly, "they were right. You did go to the clans for aid." He smiled.

"The police have been keeping close watch on everyone in the city who might have even a remote connection with the hill clans. And they're really keeping an eye on the Waern home. You're going to have a nice time getting in there."

Don nodded. "I expected some trouble. Do you know whether they've done any searching?"

Korentona shrugged. "I don't run an investigative agency," he said with a smile, "so I don't know everything that's going on. But I've heard there've been lights on up there nearly every night. And they've had crowds of people around the place. Not so much activity the last couple of days, though. They're just watching."

"I see," Don nodded. "Wonder if they've found what they were looking for?"

The other shook his head. "Doubt it," he said. "If they had, they'd relax. Now that I know what it's all about, I can figure out what I've heard. They'll take off the watch as soon as they find that book, I think.

"Oh, of course, they still want you," he added. "And they'd like to get their hands on the Waernu. But they wouldn't be frantic about it if they weren't worried about the outcome of a conclave."

"No," agreed Don. "I guess they wouldn't, at that."

He stretched. "Well, guess I'd better get on my way. I've got to get into that house somehow. Think I'll take a wander out there and see if I can get some ideas."

The merchant put up a detaining hand. "Take it slow," he advised. "You can't go up there tonight."

"Oh?"

"No. It wouldn't be wise at all. There are a bunch of young fellows that have been hanging around there lately. It isn't safe to walk around that neighborhood. They've beaten five or six people pretty badly. And they've killed a couple." Korentona paused.

"Funny," he added. "The police don't seem to be so upset about that."

"They wouldn't be," Don told him.

"So you think I'd better wait till morning?"

"It'll be a lot better. I can give you a place to stay tonight. And my house isn't too far from the Waern place, so you can get over there in a hurry if you want to." Korentona paused.

"Say, how about that fellow, Foree? Are you sure he'll keep quiet?"

Don smiled. "Pretty certain. Of course, I don't know whether an effort to talk would actually kill him. But he'd be pretty uncomfortable for a while. Might even come up with shock amnesia." The smile broadened.

"He may have already done enough careless thinking by this time to make him pretty sick." He regarded Korentona thoughtfully.

"You say there's a gang of young fellows hanging around the Waern neighborhood?"

The merchant nodded. "Quite a few of them, I think. People living around there don't spend any time on the street or in the park, you can be sure of that."

"I see." Don nodded slowly. "That way, it's a lot easier to watch the Waern place at night. Look, there must be quite a few hillmen in this city. I should think you'd know quite a number of them."

"Yes, I do, of course." Korentona smiled. "We don't exactly form a closed group, but . . . well, I'll have to admit we do think a little differently from the plainsmen."

"I know." Don reached into his jacket and slowly withdrew a stick with a thong wrapped around it.

"Many of your friends carry these?"

The merchant laughed. "Certainly!" He produced a polished stick of his own.

"Can you imagine any clansman without this sling?"

Don looked at him speculatively. "I wonder," he said casually, "what would happen if these young toughs found themselves being hunted down by . . . say ten or fifteen blood hungry clansmen. Might worry them a little, wouldn't you think?"

Korentona shook his head doubtfully. "You know what the situation is here in Riandar," he remarked. "The police don't worry too much about these robberies and beatings. But they'd be pretty perturbed if someone started hunting the hunters."

"That's what I mean." Don spread his hands. "Might even get the people watching the Waern place upset and nervous." He shrugged. "And who's to know what caused the uproar, or who's involved? After all, all the clansmen were at home. The watchers on their houses could testify to that."

Korentona looked at him curiously. "Interesting idea, at that, you know." He got to his feet. "Suppose we talk it over for a while."

Maurie Van Sickle crouched behind a bush, watching the path. This, he thought, was getting old. It had been a lot of fun at first. Profitable, too. He thought with amusement of the

old man who had scrambled about in the dirt that first night. Boy, what a beat jerk he'd been. And what a beautiful job Gerry had done on him. Clipped the stupid yokel so hard he didn't make a sound when he went down.

Then he and Walt had come in. Man, how the old guy had wriggled! He looked down the path.

Now, though? Phooey! Not a lousy person on the path all evening. He'd tried to tell Gerry they were on a loser. Park was all worked out for a few weeks. But the stubborn clown wouldn't listen. Kept insisting they try it a couple more nights. Maurie reached into his pocket.

"Better make a strike pretty soon," he muttered to himself. "The old cash bag's getting empty." He stretched, then tensed. There were footsteps on the path.

This one was his!

Silently, he gathered himself. He'd clip the guy from behind, then Gerry and Walt could come in from the other side and pin him down.

"Hope the jerk's got plenty of that stuff," he muttered.

The stroller came closer. Maurie appraised him as he walked. Oh, boy, another little, old guy. Clothes looked pretty good, too. Nice stack of cloth. Should be quite a rack of the purple in them.

Now the man was almost close enough. Maurie's eyes followed him as he approached, then passed. He launched himself in a crouching dash.

As he left the shelter of the bush, something bumped against his neck. He found himself whirling to the ground. Dimly, he saw his intended victim whirl around. He attempted to dodge the foot as it came down on his face, but it was like moving in a dream. Somehow, he was too slow.

For just an instant, he felt crushing pain, then the world dissolved into bright specks in a spreading blackness. One by one, the points of light winked out. And then, there was nothing.

As their intended victim whirled to crush Maurie, Gerry Kelton poked at his brother.

"Come on," he urged. "He can't take two of us. Let's go."

The two dashed out of their cover, then found themselves prostrate at the edge of the path.

Walt Kelton was flipped over and held in a vicelike grip, his head grinding into the path. Close by, he could see his brother. Two men held him down. As he watched, they seized Gerry's hands, twisting them so that his head flopped face up.

A third man leaned over, a long knife in his hand. Unbelievingly, Walt watched as the man thrust the knife into Gerry's throat. The boy's feet kicked convulsively a couple of times, then dropped. The toes sank, to point outward.

With calm precision, the killer turned his knife and forced it across the throat with the heel of his hand. Dark fluid welled out on the path, making a pool which flowed toward Walt.

Casually, the man pulled the slack of Gerry's shirt toward him and

wiped the blade till it was gleaming again. Then he looked toward Walt. He got to his feet.

For an instant, the boy lay limp, paralyzed with terror. Then, he kicked and struggled madly. Unbelievingly, he felt the hands which restrained him loosen and he kicked and squirmed until he was free to scramble away.

He skittered on all fours till he reached the middle of the path.

Then he struggled to his feet.

And ran.

Don Michaels flipped on the light in the vault and looked around him. Yes, it was just as Jasu Waern had said it would be. He walked over to the closet at the side of the room and pulled out a towel. As he dried himself, he continued his examination of the room.

It had been easier to get in than he had hoped. When that screaming kid had come dashing along, it had been like a stick in an ant hill. Everyone around the house had been shaken up. Several men had gone streaking over to the park. The others had given the incident their full attention.

And all Don had needed do was walk up to the front door and go in.

"Guess they thought they had a full-scale revolution on their hands," he told himself. "Wonder how many Hunters the Moreku nailed." He grinned.

The men Korentona had talked to had jumped at the plan like starving gersals. Several of them had been victimized in the past. They really wanted blood. The others saw a good hunt in the offing. Every one of them knew someone who had been robbed. He'd turned something loose, all right.

"Hope they don't get too enthusiastic about it," he said. "Hate to have 'em make a habit of that sort of thing." He shrugged.

"Oh, well, let's see where that book is."

The sides of the room were lined with books. Over in a corner was a reading table with writing materials and a conveniently placed light. Don walked over to a glass-fronted bookcase and opened it, studying the titles of the volumes within. Finally, he selected a book and carried it over to the reading table.

He leafed through the volume, noting the careful engrossing. Then he paused as he came to the pages he was searching for. He examined the ornate script closely, then looked at the intricate stamp. It was the signature stamp of the old king. Beside it was his queen's less pretentious stamp. Don nodded in satisfaction.

Now, the only problem was to wrap the book safely in the waterproof tissue he'd brought with him, and get it out of the house. He stood, looking at the door.

It might not be too safe to leave the book with Korentona, as had been originally planned. With the clansmen under surveillance as they had been, and now, with this additional disturbance, there could be a disastrous slip. Don shook his head.

Somehow, the idea of carrying this document in a peddler's pack didn't

make too much sense, either. Too many things could go wrong. He sat back in the chair and stuck his legs out.

"Well," he told himself, "I can't stay here for the rest of my life. I'll have to do something." He grinned ruefully.

"The best defense," he quoted, "is a determined and well-directed offense. So, if you don't know what to do, do anything. Then you'll find out what to do next."

He snapped the light out and opened the door. At the edge of the water lock, he breathed deeply a few times. Then he plunged in, closed the underwater door, and swam rapidly toward the surface of the garden pool.

He climbed out of the water, strode forward a few steps, then stopped in consternation. The place was suddenly flooded with light.

An oily voice sounded in his ears.

"Just stand still, young fella. That way, you don't get hurt. Not right away, anyhow."

Don turned. At the side of the garden, stood a scrawny old man, his seamed face wrinkled into a sardonic smile. In his hand, he held a small weapon.

Don recognized it—a khroal. The weapon could put out vibration which would tear any target to tiny, singing fragments in a few microseconds. It was a complete anomaly which had been in the possession of the Khlorisanu for measureless time. Its origin was mystery, its exact principle of operation a puzzle. But it was easy to duplicate, and it was one of the most deadly hand weapons known.

He held his hands out.

"Put that thing away," he snapped coldly. "Get it down—quick!"

The older man's smile broadened into happy amusement.

"Oh, funny stuff, eh?" he said joyfully. "I kinda hoped you'd be the one they'd send. Yeah, I kinda wanted to see you—what you look like, eh?" He waved the weapon.

"Just stand still, young fella, so old Jake can get a good look at you. Hey, you look like one of these here natives." The man bobbed his head.

"Woulda fooled me, you know?" He looked reproachful.

"Only, a smart young fella like you, you oughta know better than go and get that Foree so worried. You know, that fella, he comes in every night—got a lot of things he wants to talk about. Got theories. Got plans. Real eager fella. Only tonight, he ain't got nothing. Just grunts.

"Nothing goes on today, he says." Jake shook his head reproachfully.

"You know, that was careless. You shoulda let him talk anyhow a little, see. Something like that happens, old Jake, he gets ideas. So I come out here, to see who comes along." He looked at the package under Don's arm.

"That the book we're all looking for?" He jerked his head toward a door.

"Yeah, guess it is. Come on, young fella, that funny stuff, it don't work so good with old Jake, see? So let's

you and me take a nice little ride. What ya say?"

The khroal remained steadily pointed at its target.

Don hesitated. This was about as far from good as it could get, he thought. Now who was this? Where did he fit into the situation?

"Who are you?" he demanded.

"Oh, I don't mind telling you that. Name's Jake. Jake Gorham. But come on. Let's get on our way. We got a nice, long ride, you and me, see?" Gorham waved his weapon again.

"Come on," he repeated. "Nice young fella like you, he don't wanna get all scattered around. Shame to mess up this nice pretty little garden, you know?"

Don hesitated. Of course, he might be able to dive into the pool again. But the khroal could kick out a cone several feet deep. There was no escape that way. No way out of the pool, anyway—except through this garden. He moved in the indicated direction.

Gorham herded him to the courtyard and closed the door. The house lights filtered through curtains, to show the outline of a flier in the middle of the court. Gorham urged him toward it.

"All right, young fella," he said, "just stand real quiet for a minute. I'll get this thing unlocked and start them synchronizer things." He reached toward the door, then paused.

"Yeah, I been kinda wondering about you," he added conversationally. "See, I got a smart young fella down there in Oreladar. He's got people pretty well trained down there by now. Chap named Stern. You hear of him, maybe?" He chuckled.

"Kinda set him up in business here a few years back, and he's doing pretty well. Old Jake just hasta hang around—kinda look after things now and then, this boy shouldn't get in too much trouble, see?" He cleared his throat.

"See, this Danny, he ain't got too much in the brains department. And he don't do so good when people get violent. Might say he sorta scares easy sometimes. Now you, I'd say you were a little different, see? Ya know, I just might be able to use a real smart young fella like you." He flipped the khroal up and down negligently.

"Now, don't go making up no mind yet. Like I say, we got time. We have a nice, long talk on the way to Oreladar. Maybe we work something out, eh? You know, old Jake, he ain't such a bad guy. You ask Danny. He'll tell you. We could get along real nice, the three of us." He paused, considering.

"Oh, maybe you don't like the idea at first," he added. "But we got all kinds ways to persuade people.

"Got a fella, name's Masterson, down there right now. Danny tries, but he can't do nothing with him. But he'll come around. You give us a few more days—a week, maybe, he's going to be a real reasonable fella." He pulled the flier door open.

"We're getting this country organized, see? One of these days, some

fella's been smart and got in at the right time, he's going to be quite a guy. Have just about anything he wants, see?" He reached into the flier and snapped switches. A muted humming sounded through the courtyard.

"Tell you, though, Kid. Maybe old Jake's not real trusting like he oughta be. Not just yet a while. Suppose you just turn your back to me for a minute, eh?"

Don turned slowly, straining his ears.

He could hear the faint sibilance of Gorham's clothing as the man approached. Then the sound stopped. There was a slight grating noise.

Obviously, then, the man was lifting an arm and shifting his weight.

Don dropped suddenly to the ground, whirling as he went down. He seized Gorham's legs, lifted, then dashed the man's body to the ground. Swiftly following up, he seized the gun hand and twisted violently.

Jolted by the sudden fall, Gorham was quiet for a fraction of a second. Then he burst into explosive action, trying to tear himself free from Don's restraining grip. He twisted and tried to kick himself free, then groaned as the twisting pressure ripped at elbow and shoulder tendons. The khroal rattled on the stones.

Abruptly, Don jerked the tortured arm around and pinned it beneath a leg. He placed a hand on Gorham's throat and reached for the other arm.

"Aw," whispered Gorham agonizedly, "aw, take it easy, will you? I got the idea all right. So let me up, we do things your way, huh?" He looked anxiously at the face which stared down a few inches from his own.

Don saw the pleading expression on the man's face. For a heartbeat, he started to relax the pressure on the throat.

Then he remembered another pleading pair of eyes that had looked at him. The gersal, he remembered, had been just as helpless under his stick as this man was now under his hands. But given the slightest chance, it would have had its teeth in his leg. And the poison would have poured into his veins. He looked again at Gorham.

His hand tightened and drove downward.

Gorham's eyes widened, then glazed. He gave a half-choked squawk. Feet and body jerked convulsively. Then the hard, taut strength was gone and the man lay limply. Don raised his hand and put his entire weight behind the stroke which drove his extended fingers into the soft part of the man's throat. Then he felt carefully, to be sure there was no vestige of a pulse.

He got to his feet and stood for a moment, looking down at the crumpled figure on the stones. Then he brought his hands up, to look at them appraisingly. He was suddenly aware of a feeling of lightness, of an uncontrollable desire to go into rapid motion. Any motion would do. His muscles simply demanded some sort of violent action. It seemed to him as if he almost floated as he walked

over to the book he had thrown as he whirled on Gorham. He bent over and picked it up, then looked about the courtyard.

He turned and looked at the flier.

It was warmed up by this time. He moved swiftly over to it, his body jerking in a peculiar, off-beat cadence as he walked.

As he sat down before the controls, a calm voice echoed in his memory, going through his mind like a cold breeze.

"Let yourself get emotionally involved in a problem and it'll turn around and bite you."

He forced himself to sit back, his hands away from the controls.

Then he looked back at the body on the courtyard paving.

Gorham had implied that he was the power behind the whole present regime. Maybe he'd been bragging. But again, maybe he hadn't. There had been a queer, hard force about the man. There had been an aura which Don had sensed, but could not analyze. One thing was certain. This man had never been able to work under someone else's orders.

He looked around the interior of the flier.

"It's a Royal Guard job," he told himself.

He could see painted legends, giving cautions and instructions to whomever should pilot the ship. He felt under the dash.

There was a light board snapped into clips. He pulled it out and turned on the cabin lights.

Yes, it was all there. Instructions for the identification devices — description of the identification and warning lights. It gave the location of switches—the settings for com-

munications. There was even a small card inserted in a pocket. It gave the communications code used by patrol fliers in routine communication. Don smiled happily.

Now, he could fly back to the hills. It would only take a few minutes, and—

Why should he? There was an easier way now.

It would be much easier to ride this flier right on into Oreladar. If he headed for the hills, questions might be asked which would be hard to answer. But Oreladar would be the normal place for Gorham to go. And the Federation compound wasn't too far from the Palace. He could feint at the Palace landing pad, then — He nodded and studied the lighting plan and identification settings.

At last, he nodded in satisfaction, then turned his attention to the small card with the operations code. It was a simple, systematic arrangement, obviously arranged for day-to-day use, not for secrecy. He nodded and clipped it in front of him under the panel light, where he could see it easily. Then, he looked thoughtfully at the courtyard.

There was a small chance that some guard might decide to come into the house, he decided. Of course, it was still to be regarded as a private home, and they had no right to— He laughed sarcastically.

"That would worry them!" he said aloud.

He got out of the flier and leaned over the body of Gorham. It was surprisingly light. The man had been carrying almost unbelievable strength and power of will in a tiny, frail body. Don threw his load over his shoulder and climbed back into the flier. Then he sat back and looked dully at the control panel.

Suddenly, he felt completely drained. It was just too much effort to get this ship off the ground. And that long flight to Oreladar? Just how much was a guy supposed to do in one day?

He sat supinely for a few minutes, simply staring at a nothingness beneath the surface of the panel. A small noise from the house aroused him, and he jerked up. He'd have to move.

Unwillingly, he pulled at the controls and the flier raised from the paving.

A blast of air hit the side of his face and he turned his head. He'd forgotten to close the door. He snarled at himself in annoyance, then leaned over and jerked at the handle. The ship swayed and dipped toward the lighted streets and he straightened quickly and righted it with a jerk. Then he snapped off the cabin lights and reached down to set up the identification patterns.

A tinny voice snapped at him.

"Rano ninety-one, Riandar control. Seven three seven."

Don looked at the code card before him. Yes, there it was. "Return to station." He glanced at the call sign on the panel before him. He was Onarati three. He nodded. Only an important official would be in this

flier. Probably Gorham hadn't been bragging so much.

Another voice had acknowledged the order. Don looked at the speaker grill and shrugged. He set his course southward.

Again and again, the speaker rattled with calls and answers. Riandar control appeared to be busy tonight. Don smiled.

"The busier they are, the better," he told himself. "Then they can't bother me." He coughed.

"Wonder how Korentana made out?" He looked overside.

Abruptly, he was aware of another flier close to his. On its top a blue light blinked glaringly. He looked at it in consternation. Had they—? But how? He started to pull the control to him and go into evasive flight. Then he stopped.

"Use your head," he advised himself.

He reached out and scooped up the microphone. For an instant, he looked into space, thinking, then he spoke.

"Riandar control," he snarled in an imitation of Gorham's voice. "Onarati three. Got one of your guys on my back. What's the idea?" He released the button.

"Oh, boy," he told himself, "I hope that's the right approach." He looked toward the back of the cabin. If his short contact with Gorham had told him enough, and if he'd judged correctly . . . and if Gorham was—

The speaker crackled. "Onarati three, Riandar control," it said. "Seven zero five?"

Don looked down at the card under the panel light. Yes, there it was. "Give your location."

He mashed the microphone button again. "Seven hundred meters," he snarled impatiently. "South edge of town. Come on, what's this guy doing, riding my tail?"

Another voice intruded into the speaker. "Your pardon, Onarati three," it said. "This is Rano two four. We cannot read your identification lights."

Don looked down at the panel, then shook his head in annoyance. He'd neglected one switch. He reached out and snapped it on. Then he pushed the mike button again.

"So now you happy?" he demanded. "So why ain't ya telling me something, instead of coming around with all them blinking lights?"

The other flier sheered away, its blinker off.

"Your pardon," said the speaker. "We were not sure."

Don sighed in relief. That had been too close for comfort. He glanced down, then blinked and looked again.

"Oh, no!" he growled incredulously. "I left my clothes by the pool."

Kent Michaels opened his eyes. In front of him was a shattered windshield. The light support struts were bent back. The heavy plastic had crackled and powdered. He stared at it. It must have been quite an impact. All he could remember was confused motion, then blackness.

He shook his head to clear his vision, then started to unfasten his seat belt.

And his whole left side exploded as each individual muscle and nerve set up a separate protest. He gritted his teeth against the sharp, red knives of agony.

"Got to reach that belt and get out of here," he told himself. "Wonder how long I've been out?"

He forced his hand to the buckle, then stopped.

"Oh, sure, you idiot," he said aloud. "Go ahead and let the belt go. You can't hurt yourself by landing on your thick head."

He forced himself to ignore the agony in his side and shoulder and looked around the cabin. Evidently, the ship had hit and rolled. He closed his eyes, trying to remember.

He'd evaded the pass that first guy had made at him. Then, when the second one showed up and dove in, he'd gone into a dead-duck spin. So far, so good. Evidently, they'd been fooled. Probably never saw that gag before. But what had happened after that? He searched his memory.

Oh, sure. He'd spun the ship under this overhang and set it down. And the ground had double-crossed him. Even a duck couldn't have kept a foothold on that ledge. He could remember the sudden tilt as the flier slid over and started to roll. Then everything had happened at once. He could remember trying to hold off the windshield from beating his brains out, but— He opened his eyes. No use trying to analyze that part of it. Things had become confusing.

No matter how you figured it, he was here, hanging upside down in his seat belt in a pretty thoroughly wrinkled up ship. He moved his left arm experimentally.

His side went into screaming agony again.

Well, anyway, the shoulder wasn't broken. It could move—a little.

"Great," he told himself. "Now, how do you get out of this seat belt without breaking your stupid neck?"

He reached out with his right hand, to feel the padded roof under him. Well, maybe he could—He set his teeth and forced his left hand to the belt release. If he could just hold enough weight with that right hand so that— Well, no use worrying about it. Something had to be done. He pushed against the release. The shoulder screamed almost aloud. He started levering the buckle apart with his thumb.

Suddenly, the belt let go and he was struggling to put enough power into his right arm to hold himself away from the approaching roof.

For a seeming eternity, he struggled to maintain his balance and ease himself down. Then there was a soft bump. He sank into soft, cushioned blackness.

It was dark when he opened his eyes again. Incuriously, he rolled his eyes from side to side. He could see nothing. He let himself slip back into the soft nothingness.

Slowly, he came back to being. For a timeless instant, he examined a

cushion which lay just before his eyes. Then pain messages started clamoring for attention. There were too many of them to unscramble. Everything was screaming at once.

He breathed in shallow gasps, then forced himself out of his cramped position. At last, he managed to get to his knees and crawl out of the gaping hole where a door had been. Outside, he collapsed to the ground and lay, panting.

Slowly, he gathered strength and struggled to his feet. At least, his legs were in working order.

He looked back at the ship, then whistled.

"What a mess! How'd I ever get out of that one?"

He shook his head to clear it, then examined the cave.

The ledge, he discovered, wasn't particularly high. It had just been enough to roll the ship. The slope of the ground and the back wall of the cave had done the real damage. He reached out with his right hand and grabbed a vine. Yes, he could walk himself up the ledge with that. And that would get him out of here.

He turned back and inched himself inside the flier again. The emergency food pack was there. Unbroken, too. He fished it out and opened it, forcing the almost useless left arm to lend a little support as the right worked at the fastenings.

The food concentrate actually tasted good.

It could be a lot worse, he thought. Those two murderers had jumped him only a few kilometers from Kordu valley. Unless he was badly mistaken, this would be Gharu Gorge. It was steep-walled, but it could be climbed. And once he got to the rim, it would be only a day's walk to Korelanni.

"Not too bad," he told himself. "Anybody for mountain climbing?"

He got to his feet, reeling a little as his side protested against the indignity of being forced into motion. Probably a broken rib or two, he thought. He brought his right hand over and ran his fingers delicately over the left collar bone, from neck to shoulder. Then, he nodded. It seemed to be in one piece. Might be cracked, but it'd hold together—he hoped.

Slowly, he started pulling himself up the bank, pausing now and then to regain his balance and take a new grip.

Lieutenant Narn Hense gave a snort of irritation, then walked across the guardroom and switched the television off. Those news broadcasts gave him an acute, three-dimensional pain. It was normal, he supposed, for propaganda to sneak into a state-controlled broadcast, but did it have to be so damn—

"Oh, the devil with it," he said aloud. "I just help run the Security Guard around here. The Commissioner can worry about policy—and diplomatic relations, too."

He glanced at the clock on his desk, then reached out to grab his hat.

"Better take another look at the guard while I'm at it," he told himself.

He strode out of the office, hooking his sidearm belt from a hanger as he went by.

It would be a good idea, he decided, to check post number four first this time. The landing pad guard had been a little less than perfectly alert tonight.

"Probably worrying about last night," he told himself. He smiled reminiscently.

Moresma had been pretty worried and scared when the patrol had brought him in. They'd gotten him out of the jam and kept him out of trouble, but it had been close. The local authorities didn't seem to have much sense of humor when it came to Federation personnel. In fact, they seemed to welcome incidents that could—

"Funny," he told himself. "There are plenty of Galactics here, too. They get along fine, but let one of our guardsmen drop a chewing gum wrapper— Oh, well. One of those things, I guess." He walked around the corner of the building and strode down a hedge bordered path.

As he walked, he looked about at the dark Commission buildings. It was a large compound. There were several posts and it took a large security guard detachment to give it adequate protection. He glanced up at the sky.

A blue-lit flier was coming toward him, flying rather low. Suddenly, its lights blinked out.

Hense looked at the suddenly dark shape incredulously. It seemed to be arcing down, toward the compound. He started forward at a run.

Either that pilot was out of control, or he was crazy. In any event, he was going to crash in the compound unless his luck was fantastically good. He'd been coming in fast, too. The lights had indicated an official Oredanian ship.

This, he decided, was definitely irregular.

As he got to the pad, the ship came to an abrupt halt overhead. Then, it came down in a blur of speed. Not more than half a meter from the pavement, it checked its fall and settled. A door popped open.

Hense flipped his light from his belt and snapped it on. The guard, he noted approvingly, had been prompt. The man had dashed up and now stood close by the flier, his weapon at the ready.

A figure came out of the flier and stopped.

"Put out that light!" snapped an annoyed voice.

Hense snapped the switch on his hand light, then stared at the figure by the flier.

Now, what was this? He wasn't accustomed to taking orders from some joker that barged in and shot an unauthorized landing. He was the one who should be giving the orders. He started to raise the light again.

"Leave that light out, hang it," said the voice sharply. "I don't feel like being a target. And you! Don't

point that thing at me! Now come on, both of you. Let's get out of the open. Take cover!"

Hense shook his head dazedly. It wasn't right, but there didn't seem to be much room for argument right now. Somehow, that voice carried authority. Moresma hadn't hesitated. He was following the dim figure which ran from the side of the flier. The lieutenant turned and headed for a nearby building. There was a wide overhang there, close to the ground.

Another ship was screaming in, its lights darkened. As Hense dove for cover, brilliant light pinpointed the grounded flier. The guard and the unknown rolled in beside him.

There was a brilliant flash from the landing pad, then a heavy concussion made Hense's chest contract. Lurid flames rose skyward. The attacking flier rose sharply and disappeared. Hense looked after it incredulously.

"Close," commented the newcomer. "Thought for a few seconds I wasn't going to make it. Sure didn't think they'd be with it that fast." He turned and the lieutenant examined him curiously.

Even in the dim light, it was obvious he was pretty young. Khlorisana, as nearly as Hense could tell. Might be a half-caste, of course. But what was he doing here? Why a near crash landing? And who had the eternal gall to pull an attack on a grounded ship right in the Commission compound?

He continued to stare. Come to think of it, what had this joker done with his clothes? Nothing on him but a pair of shorts.

The other noticed the officer's gaze and looked down.

"Yeah, I know." He grinned. "I got busy a while ago. Forgot to put 'em back on. Didn't realize I'd left every rag behind till I was well on my way." He looked at the ground thoughtfully.

"Wonder if they'll trace Korentona through them? Well—" He faced Hense again.

"I'm Don Michaels," he announced. He held out a large book he had been carrying under his arm.

"Look," he added. "I've brought in something really hot. How about taking me over to see the commissioner? I've got to see him right away."

For more than five years, the ink of First Lieutenant Hense's commission had been perfectly dry. He'd been in one major campaign and he'd served on more than one outworld. For his entire commissioned career, he'd been a Security Guard Officer. And he'd never had a reputation for being at all tolerant when regulations were broken—or even bent.

He looked angrily at the man before him.

"I don't care," he said distinctly, "if you're Hosanna, the Great. What I want to—"

"Oh, be quiet!" Michaels held up an impatient hand. "I hate to be impolite about this, but it's no joke. I've got something hot here—really hot. I want to see Commissioner

Jackson. And when he finds out what I've got, he's going to want to see me. Now let's get over and find him. Move!"

Hense turned and stepped off. This, he decided, wasn't real. He must be dreaming. He tried to stop, but found it was impossible. He'd been given definite instructions, and—

He walked toward the path to the Residence. Behind him, he heard the newcomer's voice.

"You can go back to your post, guard. Better watch it, though. One of those Royal Guard ships might try a landing. Might be a good idea to get a few more men out there."

Again, Hense tried to turn around and challenge this fellow. Hang it, he was the Officer of the Guard. He was supposed to be giving the orders. In fact, he should have this fellow in the detention cell by now, waiting for the major to see him in the morning. He paused in mid-stride.

"Never mind stopping, lieutenant," Michaels told him. "Just keep going. I want to see the commissioner before Stern's people figure out something really good."

Hense gave up. He must be asleep. It was the only possible answer. Of course, that was bad, too. On some stations, an Officer of the Guard was permitted to take a nap between guard checks. But Major Kovacs had some sort of a thing about that. He'd made it clear that there was plenty of time for napping during off-watch time. His officers, he said positively, would never sleep while their men were on guard.

And he made checks, too. Hense struggled with himself. He had to wake up.

It was insane. How, he wondered, could a guy be asleep and dreaming —and know it? And, knowing it, why couldn't he wake himself up? This was pure fantasy. Yeah, dream stuff. He waited nervously.

Any time now, the major could be coming around to check the guard-room. Then the roof would fall in. Any minute now, he could expect to hear a window-shattering roar.

"Halt!"

It was the Residence Guard. Post number two.

"All right." Michaels' voice was low. "Hold up. Answer him. Have him continue his tour, and let's be on our way."

Hense stopped. "Officer of the Guard," he said loudly.

"Advance, one, to be recognized."

Hense sighed and stepped forward, then halted again at the guard's command.

The man flashed a light on him, then raised his weapon to his face and snapped it to the raise position again.

"I recognize you, sir. Any special instructions?"

"None. Just continue on your post."

Inwardly, Hense was reaching the boiling point. That hadn't been what he'd intended to say, dammit! He—

"Pardon, sir," the guard was saying, "but how about this man here?"

Now, Hense realized, there must be something really going on. Dream creatures just couldn't walk out of a man's mind and show up in front of an alert guard. Or had he completely lost gyro synch? He—

Michaels broke in again. "It's all right, guard. Just continue on your post. And keep an especially sharp lookout from now on."

"Yes, sir." The guard snapped his weapon up to his face again, then holstered it and turned to continue his tour.

Hense looked after him.

It wasn't a dream. It was a nightmare.

He resumed his pacing, toward the Residence.

"Oh, well," he thought resignedly, "might as well relax and enjoy it. Wonder what'll happen next."

Commissioner Jackson h i m s e l f came to the door.

"What was that fire, lieutenant?" he demanded. He noticed Michaels.

"And what have we here?" He drew his head back a little, frowning.

Don interrupted. "Are you Commissioner Jackson?"

"Yes. But—"

"Good! Here, take this." Don shoved the book out. "And let's go into your office."

Benton Jackson looked incredulously at the figure before him. He reached out and accepted the book, then turned.

"Another of those!" he said softly.

Hense followed them inside. There were, he was discovering, peculiar things about this dream business. He had completed his mission. He hadn't been dismissed. But he could wait here, or he could tag along and see what happened.

"Well, now," he told himself. "Things are looking up."

Jackson walked over to his desk, snapping on the room lights as he passed them. He sat down and placed the book on the desk.

"Well," he demanded, "what's next?"

Don Michaels reached over the desk and flipped the book open.

"Page seven oh one," he said simply. "Read it. Then, I'll start telling you a lot of things." He hesitated.

"You *can* read Oredanian script, I hope?"

Jackson nodded in annoyance. "Of course. Part of my business." He flipped over the pages, looking at numbers. Then he glanced up.

"How about the lieutenant?"

Don faced about. "Oh," he said. "Sorry. You can go back to your guardroom, lieutenant. I'm sorry I had to get rough with you, but I was in a hurry. Still am, for that matter. Only one more thing. For the love of all that's holy, have your people keep a sharp lookout for the rest of the night. I've a hunch Stern's people will try almost anything right now, short of risking full-scale battle."

Hense shook his head dazedly. Jackson looked up from the book.

"It's all right, lieutenant," he said. "Go ahead. And you might take this man's word on the heavy guard. If we've got what I think we've got, and

if Stern knows it, he might even risk a battle."

Hense suddenly realized he was no longer under any kind of restraint.

And, he realized, this had been no dream.

He had actually been ordered around like some recruit. And that by some no-good, naked native kid.

His guard had been pushed around. Unauthorized orders had been given to them.

And they'd obeyed those orders—without question.

In fact, the whole compound had been virtually taken over.

And all by this same kid.

And the commissioner said it was all right?

Hense turned away. He'd—

He took a step, then reconsidered. He had a better idea.

"This place," he said savagely, "has just plain gone to hell!" He stalked through the door.

The commissioner's amused voice followed him.

"Not yet," it said, "but it very possibly might, lieutenant. Don't forget to double your guard."

As the door closed, Jackson looked at Don, a smile wrinkling the corners of his eyes.

"Afraid you were just a little rough on him," he said. "He'll get over it, but it's pretty unsettling, you know." He shrugged.

"But you haven't introduced yourself. Special Corps?"

Don looked at him blankly, then shook his head.

"I'm afraid I don't know what that is," he admitted.

Jackson examined him carefully. "Hm-m-m," he said slowly. "Interesting! Tell me, how long have you been ordering people around like this?"

Don spread his hands. "Why, I don't really know," he said. "You see, I—"

Jackson held up a hand, smiling. "Never mind. Do you always go around . . . ah . . . dressed like that?"

Don glanced down, then grinned. "I'm sorry, sir, but I was in something of a dither a while ago. Truth is, I forgot to dress after I—"

"Wait a minute." Again, Jackson held up a hand. "Start at the beginning. While you're giving me the story, I'll have some clothes brought in for you." He touched a button on his desk, then leaned back.

"All right," he said, "let's have it. First, of course, who are you?"

While Don was talking, an impassive aide brought an outfit for him. He slipped into the clothing as he finished his account.

"So," he concluded, "all we need to do now is to force a conclave and it's all over. From what Gorham told me, I'm pretty sure I can tear Stern apart myself." His eyes clouded.

"Of course, there's Mr. Masterson. I guess they've got him in one of the torture cells."

Jackson waved a hand. "There's no problem about Masterson. We'll have him over here by morning.

"And I have an idea your father is all right. From what you tell me, I'd say he used one of the evasion tricks they teach Guard pilots. Then, he probably made a safe landing." He leaned forward and snapped down the key on his intercom.

"Emergency operation schedule, Lorenz," he said, "as of now. Have the department heads report here immediately. Have Communications get out an immediate message to Deloran Base. I want at least three squadrons, and I want 'em now. Tell 'em to burn the grass." He lifted the switch and turned to Don.

"I'm not going to take any chances from here on," he remarked. "We'll send a squadron of fighters along with you to pick up young Waern and the clan leaders. That way, they'll have protection." He frowned.

"Now, that leaves us with only one more problem."

Don looked up questioningly and the commissioner nodded.

"We'll have to find someone to represent the Waernu before the conclave. And he'll have to be acceptable to the Waernu."

"That's simple. They've already picked me."

"Won't work now. You can bring them before the clans, of course. But they'd be in a hole if you got snapped out on civil charges right in the middle of the conclave."

"Civil charges?"

"That's right. Little matter of that body out in the flier. You know, and I know, the story on that. It's clearly line of duty. But up to the decision

of the conclave, you're vulnerable. Remember, Stern can claim Gorham as a police agent. So, you were resisting arrest. Catch?"

"Ow!" Don looked down at the floor. Then he shrugged.

"But Stern has no way of knowing what happened to Gorham."

"Admitted." Jackson smiled. "But he might guess. You'd have to be consulting with his people for some time before the conclave, you know. And he'd have time to figure things out. Here you are. Here's the clan book. But where's Gorham? And Gorham went up to find that book. Adds up, you see."

"You mean I've got to stay under cover from now on?"

"Not necessarily. The clan warden doesn't have to be identified ahead of time. Usually, it's just an honorary job, any way. But this time, he might really have to perform his traditional duty." He looked at Don seriously.

"Remember the private conversation between claimant and prime minister? About that time, the warden is the only protection the claimant has.

"And this is one time a claimant may really need protection."

Daniel Stern slapped a folder down on his desk and got to his feet. He circled the large office, then stopped, looking down at Gorham's vacant desk.

What had happened to Gorham? Papers were stacked all over his own desk. And they should be here. Most of them had been old Jake's concern. He hadn't realized how much detail the old man had controlled.

But where was Gorham? He'd come in from Riandar. Reports showed that much. Then, his flier had suddenly dashed over and landed on the Federation pad. They'd tried to stop him, but—

Something must have gone wrong up there at Riandar. Something must have made Gorham decide to come back and make a separate deal of his own. But why? There was that pile of clothes in the Waern house. Had he—?

Maybe that blast had killed Gorham and destroyed his evidence.

He looked around hopefully. It was possible. No effort had been made to restrain him. He still controlled the Ministry. No effort had been made to limit his authority.

He picked up a sheet of paper. Oh, no? They didn't want to limit him—they wanted everything. Here was this demand for a conclave.

And with that Waern kid running around loose, that was bad.

And he had no one to talk to! Of all the people in this palace, not a single one could serve as confidant. With Gorham gone—

He shuffled through the papers. Yes, here was the formal demand for a conclave. He looked at it unhappily.

And here was the transcript of the Waern claim. It looked too good.

He tossed the papers back to the desk. It was good, and he knew it. He'd seen the originals in the heraldric files. They were destroyed, of

course. But here was a photo of that clan book!

And worse, here was the notice from the Resident Commissioner that the claimant had requested protective intervention from the Galactic Federation. That was really bad. He could remember his interview with the commissioner on that.

Jackson had always been something of a problem. He was a stubborn man. But up to now, he'd always backed down—if enough pressure was put on him. This time? Hah!

He'd come in, bringing that rancher—that Kent Michaels. Stern frowned.

Hadn't old Jake said that guy had been shot down—was dead?

He hadn't looked very dead. As councilor of the Waern clan, Michaels was supposed to be calling on Jackson for backing. Who, Stern wondered, was backing who? He recalled the interview.

They'd come in. And he'd started to establish dominance over Jackson.

Then that Michaels had butted in. He was worse than old Jake. What with one thing and another, he'd backed Stern into every corner in the office.

It had ended very simply.

Jackson had simply declared that there would be a conclave.

The Stellar Guard detachment would be in attendance. No irregularities would be tolerated.

And he'd even named the day—today. Then the two of them had walked out.

Stern twisted his chair around viciously and sat down. He punched at a button on his desk.

An aide came through the door. That was another thing. After that fiasco at the Michaels ranch, he'd had to get a new aide. He motioned the man forward impatiently.

"You have made final arrangements for the conclave?"

"Yes, sir. The Heraldric Branch has everything set up. The clans have already gathered in the Throne Room. The private conversation will be held in the Blue Palace. After the conversation, you will escort the claimant across the south lawn, to the Throne Room." The aide half turned.

"I can get you the plan and diagrams, sir."

Stern waved a hand. "Never mind. I've seen them." He paused.

"Now, has my space yacht been positioned back of the Blue Palace? Is it properly serviced?"

The aide paused. "Yes, sir." He looked curious, but said no more.

Stern examined him haughtily. "Very well," he said. "You will remember my instructions. Discuss the yacht with no one. You may go."

He watched as the door closed, then got out of his chair again. It was time for the conversation. He glanced about the office, then went out into the private garden.

As he walked, he looked at the side paths among the trees, which seemed to beckon to ever more enticing vistas beyond. There were the miniature landscapes, with their mountains and lakes. There were the small cottages,

where one could sit and enjoy a cooling drink. He smiled wryly and walked across a miniature bridge.

As he reached the other side, he stopped, to lean against the rail. This was not going to be easy to give up.

He watched the water birds for a while, then went on his way.

As he came through a small grove, he saw the yacht. It had been set down where it could easily take off, and yet where it was impossible to see unless one came within a few meters. The aide had done well. He'd have to remember—

No, he thought, someone else would be dealing with that aide in the future. He'd be long gone.

He walked up to the ship and opened the door, looking inside. Then, he climbed in, glancing at his watch. It was past time for the conversation. The claimant and his warden would be waiting. So would the other clan wardens, who waited to make up the advance guard of honor.

He wondered how long they'd wait.

He sat down in the pilot's chair and glanced at the gauges. Then he flipped on the view panels and looked outside at the trees.

It had been a lot of fun. But—

"No use taking foolish chances," he told himself.

He reached for the starting bar, then hesitated.

"Wait a minute," he told himself. "Who's the prime minister around here, anyway? I can—"

He sat back, thinking. Of course. It was such a beautifully simple idea. Really foolproof. He should have thought of it before.

There would be only the few of them in that private conversation. He should have realized that. They'd present no difficulty. The wardens? He snorted.

Just a bunch of dressed-up idiots. No trouble there. Anyway, only one of them was directly concerned. And he wouldn't really know what was going on. Only the claimant would know. He laughed.

"Wonder just how it feels to get ordered around like that?"

After the conversation, he could walk into the conclave with signed papers. And who would dare challenge that? Even the commissioner's people would have to admit defeat. He smiled. Michaels? He'd be standing there with his mouth open. Nothing he could do. It would be too late.

And once he got that crowd back into his jurisdiction, there'd be no further problems. He'd be sure of that.

This was actually what he'd been waiting for! This was a formal conclave, called at the request of the tribes themselves. They'd have to choose now. And there was no one else.

He, Daniel Stern, would walk out of that Throne Room with the silver robes over his shoulders.

King Daniel!

He climbed out of the yacht and paced toward the small doorway at the back of the Blue Palace.

He came into the private conference room and walked with dignified stride toward his place. As he came under the canopy, he stopped and placed his hands on the rail.

With haughty appraisal, he allowed his gaze to roam over the men who stood to flank the outer door. At last, he stopped, to center his attention on the two who stood in the doorway.

Here were the two key figures—the claimant and his warden.

The man on the right was dressed as for battle, his polished sling stick shoved into his sash at an angle so as to be easy to his right hand. Just to the left of it was thrust the long hillman's knife. There was only one thing unorthodox about his equipment. Stern frowned as he inspected that.

In his right hand, the man carried a long device of wood and metal. Obviously, it was a weapon of sorts. Stern examined it carefully, speculating as to its nature.

It was, he finally decided, some type of beam projector. Judging from the long barrel, it would throw a narrow cone. Mentally, Stern calculated the probable dispersion.

Some Stellar Guard weapon, he thought, that had been loaned to this fellow. Well, it made no difference. Whoever the fellow was, he'd never dare use such a device here. He turned his attention to the other—the claimant.

So this was Pete Waern?

The boy was slight, he noted, even for a native. Definitely, the studious type, decided Stern. He'd present no problem at all.

The regent almost allowed himself a smile. This was going to be easy! He motioned the two forward.

"You have matters for our attention?" he inquired formally.

Waern stepped to the rail.

"I here claim to be the rightful heir to the throne of Oredan," he said slowly. He took a book from under his arm and laid it on the table beside Stern.

"I here present the book of my ancestors," he went on. "In it, at the place marked, is the contract of the last lawful king of Oredan, and of his queen. I was designated to be their son."

Stern nodded. "It is well," he said. "We shall consider this matter."

He opened the book and glanced at the script and the two signature stamps. Then he jerked back dramatically, staring at the book in simulated consternation. He bent forward again, for a closer look.

"This is most strange," he said in a low, wondering tone. He shook his head.

"These looked authentic in reproduction," he murmured. "But now?" He glanced at Pete and was forced to repress a smile.

The expression on the Waern boy's face was perfect. He had him! He looked about the room, then gazed sternly at the claimant.

"I find it almost impossible to believe," he said coldly, "that there is a person in this realm who would have the temerity to bring such a

document to my attention for serious consideration."

He stabbed a finger out to point at the book and fixed Pete with an accusing stare.

"I find this a complete forgery," he said harshly. "Your claim is, of course, denied and declared fraudulent." He stepped around the rail, to tower over the boy.

"You will, therefore, acknowledge your crime in writing." He reached out and took a pen from the table.

"You will now write the words, 'forgery, no genuine contract,' over these pages. And you will sign your name." He paused, thrusting the pen toward Pete.

"You will then—"

The warden stepped forward.

"Pete," he said sharply. "Listen to me!"

Stern looked up in annoyance. The Waern boy had started to take the pen. Now, he stopped and jerked around.

"You will listen to nothing this man tells you," ordered the warden. "You will do nothing he asks. Do you understand that?"

The boy nodded. "Thanks, Don," he said. "He almost got me that time."

Stern glared angrily at the warden.

"You will go back to your place," he ordered. "Do not attempt to interfere again."

Incredulously, he watched as the warden shook his head.

"Sorry, fellow," he heard the man say, "but that doesn't work on me. And it won't work on Pete—not again. Now suppose we do this thing right."

Stern examined the man more closely.

He was larger than the Waern boy, and more strongly built. But he was very little older—and definitely no giant. He was at least fifteen centimeters shorter than Stern himself, and much lighter. Looked, Stern decided, like a galactic. He felt a surge of hatred.

No little man could dare defy him!

He tilted his head a little and looked downward into the warden's eyes.

"Your duties are to protect the person of this boy, so long as he is a legitimate claimant for the throne," he said contemptuously, "not to advise him. Your presence here is merely required by tradition, not by real need."

He smiled coldly. "And, since his claim is obviously nonexistent, you have no standing here. Leave this palace at once!" He pointed imperiously at the door, then turned his attention to Pete again.

"You will write as I told you. Now!"

"Ignore him, Pete." The warden raised his weapon a little.

"Name's Michaels," he told Stern conversationally. "Donald Michaels. You've met my father already." He moved the long weapon again.

"You sent some of your people up to our place a while ago. I destroyed them with this." He jerked his head

downward at the barrel of the weapon.

"Brought it along with me when I came down here. It's quite capable of taking you apart, I assure you." He moved a hand on the stock.

"And if you attempt any more of that unlawful coercion," he added, "that's just what will happen. I'll protect my claimant, you see."

He tilted his head, to indicate the other clan wardens.

"These men know what is supposed to be done here as well as you and I," he added. "We all know this is a purely formal meeting. The validity of these documents has already been determined."

"As Prime Minister, I—"

"It is no part of your duty here to rule on the validity of any document," Michaels interrupted. "And it certainly isn't proper to attempt in any manner to persuade a claimant to abandon his claim. Not here. These things are proper only before the full conclave."

"Are you trying to tell me my duties?" Stern looked incredulous. This was not going well at all!

"I am doing just that," Don told him evenly. "Apparently someone has to." He glanced around the room. "Are there any other claimants present?"

Stern felt drained of energy. What was this? The father had been impossible to control—like Gorham. Did the son combine other powers with that resistance? Where had these Michaels people come from? He tried once more.

"There are no valid claimants present," he snapped sharply. "I—"

"That's not exactly what I asked," Don told him. "But we'll take it as meaning that Pete's the only claimant. So, I demand that you follow the ritual and escort him to the conclave." He waved the weapon.

"Come on. We've been held up here long enough. Let's go."

Suddenly, Stern felt powerless. This whole thing had fallen apart. He should never have come in here. He should have just taken off—as he had intended. In space, he would have been safe, at least. Here? He bent his head resignedly.

He could try one more thing. This was a young man—inexperienced. Maybe—

"You will precede us," he said.

"No," Don told him, "I don't think I will. I think it will be better if I leave that honor to one of the other wardens. I want to be able to see you." He jerked his head at a man who stood to the left of the door.

"Will you honor us, Mernar-dar?"

The other tilted his head. "It is I who am honored," he said. He turned and went out the door.

Dazedly, Stern walked forward, pacing with the claimant. He paused as he got to the porch. Michaels was still standing inside the door.

"Right here," he said coldly, "we shall return to a very old custom. I shall remain, to protect the rear. And I shall watch the entire progress of the advance to the Throne Room." He smiled grimly.

"You are, I suppose, familiar with the range of a medium duty blaster?"

Stern nodded. "I've seen them operate," he admitted.

"Good." Don nodded. "This thing will outrange them a little. I'll have you in my sights all the way. Remember that, and don't do anything that might cause me to fear for Pete's safety."

The wardens spread out, to fan out before Stern and Pete. Acting the part of scouts before a column, they started across the wide lawn, toward the Throne Room.

Stern watched them for a moment, then took Pete's arm. Together, they walked down the long flight of steps. For a moment, they paused at the path, as ritual demanded, for a signal to continue.

Stern allowed his thoughts to race.

There was no question about it now, he thought. This boy would be upheld by the conclave—if he got before it. And if he were now sustained, an ex-regent named Stern would find himself in very grave trouble indeed.

This was much worse than that mob in Tonar City. He glanced toward the gate in the wall ahead and to his right.

Just beyond that door lay his yacht—and safety. If he could only figure out a way—

Across the lawn, a warden was making the signal for the advance. The way, then, was ritually clear. Stern stepped forward, still glancing toward that door.

They would pass within just a few meters of it. Now, where was that Michaels?

Suddenly, he realized he could never hope to get out his hidden weapon, find Michaels with it, and vaporize him. Not until the other had plenty of time to release a beam of his own. He shuddered, remembering the destruction that weapon had caused up in the Morek.

At this range, even the narrowest blaster beam would fan out enough to destroy a man's entire body. And that thing, whatever it was—

Suddenly, he smiled. That was it! It would spread out too much.

He flipped out the little khroal from its hiding place in his sleeve and placed it against Pete's back. With his other hand, he gripped the boy around the throat. Then he turned, seeking to locate Michaels. The fellow was out of sight.

Probably, Stern thought, he had remained in the shadow of the huge pillars of the porch—or even inside the Blue Palace itself.

His whole body itched. The man might fire without thinking! He raised his voice.

"Can you hear me, Michaels?"

He had been right. The answering voice came from the palace doorway.

"I can hear."

"Then listen carefully." Stern put all his persuasive power into his voice.

"I shall not harm this boy unless I am forced to, but I assure you that if I am interfered with, I'll not hesitate. From where you are, you can do

nothing. Any blast you release will spread out to kill him as well as me. You realize that?"

"I can hear you." Don's voice was expressionless.

"And," added Stern loudly, "if I am struck or attacked, I will have time to release this khroal. This is also obvious, is it not?"

There was no answer. Stern frowned. What was the fellow doing? He drew a deep breath. He'd have to go through with it now, no matter what.

"I am going to the gate in the wall over there. Shortly after I go through that gate, I shall release this boy, and use a means of escape which I have prepared. You may watch me, of course, but make no effort to stop me —or this boy dies."

He paused again, waiting for an answer.

The wardens, he could see, had stopped and stood, undecided. None of them was close enough to be dangerous.

This, he thought with a surge of hope, was going to work out after all. He turned his eyes for a swift glance at his captive.

Once at the yacht, he could release a bit of energy from the khroal. This boy had destroyed all his careful plans. No, he decided, Pete Waern could not be allowed to live and enjoy those good things the palace afforded.

He tightened his grip about the boy's neck.

Don Michaels had strapped his sling on his arm. Now, he lay on the floor of the Blue Palace. Stern's head was centered in the scope and the cross hairs bobbed slowly about a spot just in front of the man's right ear.

"No question about it," Don told himself, "if Stern gets Pete through that gate, that'll be the end of Pete."

He put pressure on the trigger.

"The guy's as sore as a singed gersal," he told himself. "And half nuts besides. He'll spray Pete with that thing if it's the last thing he ever does." He continued his pressure on the trigger. The cross hairs still hovered about the man's ear.

"Hope that anatomy book was right," he told himself.

Of course, he realized, if he missed the tiny target—if the bullet failed to destroy the motor centers on impact—Stern would die anyway. But he just might be able to press the release on that khroal. And that wouldn't be good.

The aiming point moved a trifle and Don eased back into position.

What had happened to the trigger on this thing? Had he forgotten to take off the safety? Again, the cross hairs started to wander and he eased them back—back toward that little spot.

The rifle leaped upward with a roar, slamming back against Don's shoulder. He let it settle again, examining the scene anxiously through his sight.

Stern was still on his feet, but his hands were dropping limply to his sides. Don could just see the glitter of the khroal by Pete's feet. Then,

Stern's knees bent and he flowed to the ground.

Pete had turned at the sound of the shot. He looked back at the palace door, then glanced at the khroal.

At last, he knelt beside the body on the ground. He felt the throat, then examined the man's head. For an instant, he looked a little sick, then he looked away from the tiny hole in front of the man's ear. He got to his feet and waved a hand.

"Pinwheel," he shouted.

The newly enrobed King of Oredan settled back in his chair and shook the heavy cloth back from his shoulder.

"So," he said thoughtfully, "it's all over." He sighed.

"And it's all just beginning, too. Now, I'll have to form a government." He smiled sadly.

"It's funny, Don. For years, I've dreamed of actually being king. Now it's suddenly happened and I feel about as helpless as they come." He stretched out a hand. "All at once, I'm realizing it's pretty rough for a schoolboy to suddenly find himself with a whole nation to run. I don't know where to start."

"You'll get used to it, Pete." Don smiled at him. "Get yourself a few really competent advisors. Tell them what you want, and let them go out and get some competent people to do things. And you've got it whipped."

"Yeah." Pete nodded. "Yeah, I guess that's the way it's done. But—Well, I asked for it. And they handed it to me." He looked directly at Don.

"How about you? You've got plenty of clan rank, you know. What department do you want?"

Don shook his head slowly. "Don't look at me," he advised. "They offered me a spot in the Stellar Guard and I'm signing up." He glanced around the room.

"I've got no place here."

"What are you talking about?" Pete frowned. "I owe this whole thing to you. I wouldn't even be alive if you hadn't been around. You can have anything you want here, and you know it. What can the Federation offer you?"

Don shrugged. "Oh, I don't know," he said. "Lot of work, of course. Pride of accomplishment, maybe. Peace of mind. Hard to say. Only one thing I'm sure of. I wouldn't work out here."

"I don't get it." Pete shook his head.

Don looked at him, his face expressionless.

"Look, Pete. Do you really like me?"

"Why, of course. You saved my life and set me on the throne. I told you that."

"Not just what I mean. Do you feel perfectly relaxed and easy when I'm around? Would you really call me a close friend?"

Pete squirmed in his chair. Uneasily, he looked overhead at the tassled canopy.

"That's a lousy way to put it," he complained.

"Well?" Don's face was still expressionless.

Pete forced himself to look directly at him.

"I don't know. I . . . well, you've done so darn much. Well, I guess I am a little afraid of you, at that." He looked at the floor.

"Oh, all right. I'll have to admit it. You do actually make me uneasy. Always did, even back at school. Lot of fellows felt the same way."

Don stood. "That's what I mean. And it would get worse if I hung around. You'd get so you hated yourself—and me." He held out a hand.

"You're the king—the ruler of this whole nation. That means you've got to be the head man. No one can give you orders. They can suggest, but no one can be even capable of giving you orders." He smiled.

"Dad will rebuild the ranch, of course. And I may come back once in a while, in a very quiet way. But for the most part, I'd better not be around too often."

Pete got to his feet. Suddenly, he looked relieved and at ease.

"I'll make certain your ranch is never interfered with," he promised. "It's yours, so long as you or your father want it. And I hope that some day it'll be a home for your kids." He paused.

"If you ever do decide to come to the capital," he added, "you'll be a welcome guest at the palace."

"O.K." Don grinned. "Let's leave it that way. Good-by, then, and I hope yours is the longest reign in history."

He turned and walked through the curtain.

THE END

Statement of the Ownership, Management, and Circulation required by the Act of Congress of August 24, 1912, as amended by the Acts of March 3, 1933, and July 2, 1946 (Title 39, United States Code, Section 233) of Astounding Science Fiction published monthly, at New York, N. Y., for October 1, 1959.

1. The names and addresses of the publisher, editor, managing editor, and business managers are: *Publishers,* Street & Smith Publications, Inc., 575 Madison Avenue, New York 22, N. Y.; *editor,* John W. Campbell, Jr., 575 Madison Avenue, New York 22, N. Y.; *managing editor,* none; *business manager,* none.

2. The owner is Street & Smith Publications, Inc., 575 Madison Avenue, New York 22, N. Y., a corporation owned through stockholder: The Conde Nast Publications, Inc., Greenwich, Conn.: stockholders owning 1 percent or more of total amount of stock: Charles C. Nast, 420 Lexington Avenue, New York 17, N. Y., Iva S. V.-Potcevitch, 420 Lexington Avenue, New York 17, N. Y., The Patriot-News Co., Harrisburg, Pennsylvania.

3. The known bondholders, mortgagees, and other security holders owning or holding 1 percent or more of total amount of bonds, mortgages, or other securities are: None.

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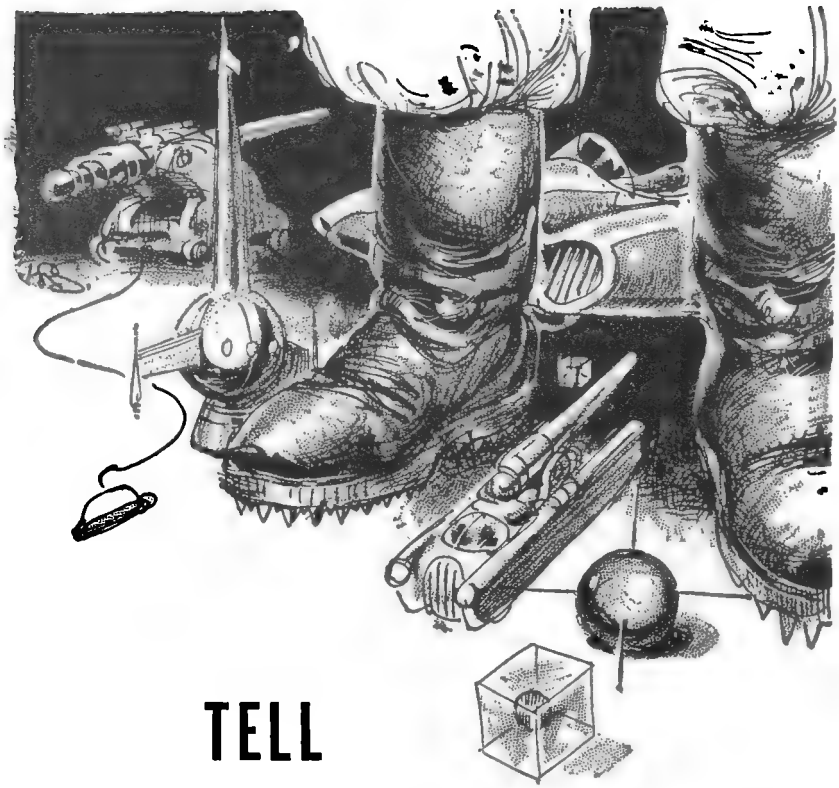
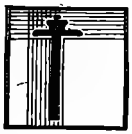


TELL THE TRUTH

BY E. C. TUBB

One of the principal reasons why we are driven to lie is that, so frequently, the truth is a vile deceiver. However, if you want to mislead ... tell the truth!

Illustrated by Summers



HE control room was very quiet, so quiet that the tiny clicking of relays could be heard over the whisper of the blowers, the soft sounds of men breathing as they watched their instruments. On the main screen a tiny fleck of green light showed clean against the swollen ball of the planet below. Other flecks of green reached towards it, merged, blended into one. Serg Arnold blew out his breath in an audible sigh.

"Well," he said, "that's that. At least they didn't blow him into dust."

"Why should they?" Captain Winter rasped a big hand over his stubbled chin. It was a sign of the tension they had been under that he hadn't shaved. "They were expecting him, weren't they?"

"Sure, but what the Klang decide to do is something known only to the Klang. They could have assumed that we'd planted a planet-buster on that ship, a virus of some kind, anything." Arnold spread his hands in a gesture which five hundred years hadn't been able to eradicate from his heritage. "The Klang, to put it mildly, are a suspicious people."

Winter snorted, He was a rough, bluff man of action and had little sympathy or understanding of the complex thought procesess of the ambassador. To him force was something to be met with greater force. He said so. Arnold pursed his lips.

"The trouble with you, captain," he said mildly, "is that you lack imagination. That lack is also your greatest strength. You simply refuse to believe that we could ever meet up with a race which is stronger than we are."

"Stronger?" Winter made a rude noise. "Your pardon, ambassador, but that is difficult to accept."

"Strength is relative, captain," said Arnold mildly. "Earth is strong, I agree, but not when compared with the Klang." He stilled the other's protest. "I assure you that is so. We could inflict terrible damage to them, but they could do more than that to us. They could utterly destroy us."

"But—"

"An unpleasant fact, I am the first to admit but, unfortunately, a true one. That is why we are here—we have no choice."

Winter snorted and found relief in an unnecessary check of the control room. Arnold stared down at the planet below. It was inevitable, he thought grimly, something preordained since men had first ventured into space.

The moon had been the hardest part. Then Mars and Venus, still hard but only because new problems had risen to replace those already solved. New drives and techniques had smoothed the path to the outer planets. The invention of the negative-gravity drive had opened the way to the stars and ships, powered with the NG engine, had reached ever outwards.

But Earth was not alone. There were other races expanding as Earth expanded, their own ships reaching out towards the stars. It was only a simple question of time before those

expanding civilizations should bump into each other. So far Earth had been lucky—the civilizations she had met had been either on a lower technological plane or had been friendly and co-operative. The Klang were something different.

The Klang were a race of fanatics.

Arnold sighed, wondering what Earth would have been like had the Spartans managed to survive and carry their ideas of an absolute totalitarian warrior-state to the ultimate. Something like Klang, he imagined, stern, inflexible, ruthless and fantastically suspicious.

And logical, he must never forget that. Coldly logical, emotionlessly so. He smiled, it was a comforting thought. It even caused him to stop worrying about the man he had sent down to the planet below. He was humming as he went to his cabin and rested—there was nothing else now he could do.

They brought him in, sat him down, offered him a drink and a cigarette. He accepted both with obvious gratitude and sat holding them, blinking in the brilliant lighting. It was, to his examiners, a damning confession of weakness.

"He is a fool!" Gengston glowered at the Terrestrial. "The drink or the tobacco could be drugged."

"He is afraid," said Huen. "He smells of fear."

Melick said nothing, ignoring the tiny voices from the commutube buried in his skull behind his ear, concentrating instead on the man sitting before him.

He was not a very good specimen of his race. His head was too big and lolled on a scrawny neck. Thin hair barely covered the pink dome of his skull. A shapeless suit hung limply over a skinny frame. He blinked weak, watery blue eyes and made nervous gestures with his mouth.

Huen was right, thought Melick, the man was afraid. At least, he corrected himself, he gave the appearance of being afraid. The two things were not the same as he had reason to remember. There had been another time, another place when—

He broke off the train of thought, halting the instinctive movement of his hand to the scar on his face. He had waited, he decided, long enough.

"You are comfortable, Mr. Jones?"

"Yes, thank you, sir." Jones swallowed, the Adam's apple bobbing in his throat.

"You understand, of course, why you are here?" Melick leaned forward a little as he spoke, the overhead lighting throwing into strong relief the lines of his face and jaw. It was a harsh, stern face, as if made of steel and stone and covered with plastic. The scar which ran from temple to mouth was a darker line against the dark skin. His skull was hairless, his face the same. The ears were slightly pointed and set close against the narrow skull. The pupils of his eyes were vertical slots. Aside from that he was quite humanoid.

"You realize how important this examination is?" Melick continued.

"That was made quite clear to you?"

"I think so, yes." Jones didn't seem to be too certain. "Something to do with a test, isn't it?"

Melick felt contempt for the man, was this the best Earth could provide?

"It is customary procedure when the Klang contact an alien race," he explained. "An individual is the product of his society. It is not necessary to test the whole of any batch of material, a sample is sufficient. So it is with civilizations. It amazes me that you were not briefed on the purpose of your journey."

"They told me that you would ask me questions," said Jones. "They told me to co-operate with you in every way." He looked at the drink in his hand and sipped it. He puffed at his cigarette. He acted as if he were going through motions which were expected of him.

"I see." Melick leaned back, observing, calculating. "You find the drink to your taste?" he asked abruptly. "The cigarette to your liking?"

"Yes, thank you, sir."

Melick nodded, conscious of the watchfulness of his associates. He was senior to them—but only while he could prove his ability to remain so. His position, his very life, depended on his ability to conduct this examination and arrive at the correct conclusions.

The commutube whispered behind his ear.

"Those things are poisonous to his metabolism, aren't they?" It was Huen.

"Yes." The subvocalization did no more than stir the air before Melick's lips. Jones could hear nothing of the secret conversation.

"Then why does he use them?"

Melick couldn't answer that. He didn't know and neither did any of the Klang including the members of the first-contact team which had resided on Earth for language tuition. That team had brought back a knowledge of English and a mass of speculation coupled with a few assumptions. Their opposite numbers, the Terran team, had provided more data but little else. The two planets now had a working knowledge of each other's language and an agreement that each should judge the other race on the basis of a single selected representative. The demand had been Klang's, Earth had dared not refuse.

Jones was the representative Earth had chosen.

There was no hurry, the destiny of a world does not lead to impatience, and it takes time to analyze a civilization from a single specimen. It would have taken longer with a group for a group gives to each member an added strength, but Jones was alone. Slowly, delicately, Melick probed and guided, seeking to determine the true strength of Earth. Strength, to Klang, was all important. A strong world would mean the necessity of a pact, of trade, of co-operation. A weak world would be crushed, assimilated or destroyed. A medium-strength world would simply be destroyed.

The fate of Earth depended on Jones.

If he was aware of it, he gave no sign. He sat and smoked and drank when drinks and smokes were offered. He answered questions and went into details. He volunteered nothing even though he may have had the impression he did. Every question Melick asked was calculated to produce a desired answer. It was an indication of his skill and thoroughness that he could use an alien language so well. But, despite that, he began to have doubts.

"On the face of it this is a paradoxical civilization," he said. He riffled a sheaf of papers before him, a transcript of everything which had been asked and answered together with the reports of the first-contact team. Huen was quick to show his grasp of the situation.

"They poison themselves for no good reason. They know that alcohol and tobacco smoke are detrimental to them and yet, according to Jones, it is a world-wide habit."

"An intelligent race does not poison itself." Gengston was emphatic. "Therefore, they are either unintelligent or do not consider their habits harmful."

"That is what I mean by an apparent paradox." Melick was tired, it showed in the darkening of the scar which writhed over his cheek. Jones could rest, was resting at this moment, but for his examiners there could be no rest. They had to work while he slept, digesting what he had said, evaluating it, preparing the next batch of questions.

"They know that they are indulging in harmful habits and yet they continue to do so." He riffled the papers. "Here, Jones admits it openly. When we tried to pin him down he made some vague generalization which showed that he did not know why he drank or smoked, it was something he had done all his adult life." He pushed aside the papers.

"He is weak," said Gengston. "I could break him with one hand and without effort. Is that a result of his addiction?"

"Perhaps. Yet Earth sent him as their champion," reminded Melick. "Would they have sent a weakling?"

"If he is the best they can offer, then we have nothing to fear." Huen was confident. Melick shook his head.

"It is always a mistake to underestimate an enemy." His hand strayed to his cheek. "It can sometimes be fatal. Jones may be far stronger than we realize."

"Is it an attribute of strength to deliberately court weakness?" Huen was doubtful. "Can a man or a race be so confident?"

"I can imagine the possibility even though I cannot understand it." Melick passed on. "We know that Jones, and therefore his race, has a firm belief in a life after death. This is another thing I cannot understand. Death is final, the ending of all. It is with us and with others. To Jones, however, death is a gateway to a better life."

"Another paradox," said Gengs-

ton. "If death is so wonderful, then why do they not meet it before it comes?"

"He regards it as a sign of weakness." Melick didn't have to refer to the report, he knew it too well. "This belief is something almost inbred. He didn't mention it except in passing. He simply has a certainty of life after death." He looked at the others. "I need hardly emphasize what that could mean."

"Our warriors fight and die because it is their duty, because there is nothing finer in the universe than to fight and die." Huen repeated the credo of Klang with mechanical efficiency.

"Without reward or hope of reward," said Gengston. "If—" He shook his head. "The concept is so alien that it cannot be comprehended," he said. "It has no logic."

It was the answer Melick had expected. As Gengston had said it had no logic—no apparent logic, that is. Could an intelligent race be so illogical? And yet Earth had a highly mechanical culture, they had faster-than-light drive, they had a civilization more highly developed than any Klang had yet seen. Could these things be achieved without logic?

It was a problem and one which had to be solved. Earth was dangerous, Melick knew it. It was a bubbling hive of new ideas, new concepts, a paradox of a civilization based on apparent illogic and yet, despite that, successful. He could visualize the impact of Earth on Klang. The old, rigid, easily understood way of life would hold out for a while and then—

Klang had assimilated many worlds. Was it the turn of Klang to now be assimilated in turn?

He revolted against the idea, every trained cell of body and mind recoiling from it. Better by far for Earth to be destroyed, utterly eliminated, wiped out in a blaze of atomic fury than for Klang to be so conquered.

If Earth could be wiped out.

If Klang had the strength to destroy and not be destroyed.

Jones had to provide the answer to that.

Call a chair a table and it's still something to sit on. Call a humanoid, oxygen-breathing creature a Terran or a Klangian and they are basically the same. Melick had no doubt that Jones was telling the truth—he was now incapable of doing anything else. The techniques developed by Klang for use in exactly these circumstances had seen to that.

Jones couldn't lie. Jones couldn't even censor the truth so that he would tell part, not all. Jones would answer without fear and without reservation. And he was a product of his culture and would represent the strength of his civilization. And, to Melick as to Klang, strength was another word for military might.

"We have analyzed this 'poetry,'" said Huen. They were assembled waiting for Jones. "The one he called 'Hiawatha' is simply a saga of one man battling many tribes. 'The Charge of the Light Brigade' is of a

group facing, and defeating impossible odds. The one about the ship, 'The Revenge,' is the same but about a sea battle not a land battle. There was also one about a single man holding back an army with hand-cutting weapons." He riffled the report. "The others all follow the same trend."

"Significant." Gengston had been impatient when Melick had asked Jones to recite some of his favorite poetry. Words were words, what difference how they were put together? But now, after reading the analysis, even he was impressed.

"They all show the deference placed on warriors," said Huen. "This is to be expected in a military culture, we have similar sagas ourselves. However, we emphasize group effort while these Terrans apparently place importance on single-handed, or small-group combats." He made a gesture of impatience. "The sense of these sagas, however, is all wrong. Not one of them tells of logical development of battles but of victories, won against all logic."

"They are an illogical civilization," reminded Melick. He grew even more thoughtful. "Of course, if they are convinced, as they are, that there is a life-after-death, then such battles against hopeless odds are logical. What matter if they die?"

He sat motionless, letting the thought develop in his mind. For a frightening moment he had the conviction that Earth wasn't illogical at all. The moment grew and, for the first time in his existence, he felt the sickness of fear.

Never underestimate the enemy!

He shook off the mood as Jones was led into the room. He sat down, picked up the inevitable drink, puffed at the inevitable cigarette. It was good alcohol and good tobacco, Earth-provided, naturally, since they had nothing like it on Klang. Dutifully he waited for the examination to progress.

"You are comfortable?"

Always it was the scarred one who spoke, never the others. They merely sat and watched with unwinking eyes which reminded him of those of a cat. He didn't even know their names, not that it mattered, he doubted if he could ever learn to tell them apart. In their black, yellow-piped uniforms they looked like identical twins.

"Yes, thank you, sir." Jones wasn't sure about the title but he guessed it could do no harm.

"You have been very co-operative," said Melick. "As yet we have spoken of your culture, your customs, your world in general. Now we would like to know a little more about you as an individual. Are you a warrior?"

"A soldier?" Jones shook his head. "No, sir. I'm a salesman."

"You sell things?" Melick hid his surprise. On Klang only the unfit, the despised, the military outcasts handled trade. And yet Earth had sent this man as her champion. Could there be some mistake? He mentioned the possibility, Jones was emphatic.

"No, sir, you understood me correctly. I'm a salesman and, if I say so myself, a good one. You have to be to handle the lines I carry."

"And what do you sell?"

"Children's toys."

Ambassador Arnold came running when Winter called him. The bluff captain pointed to the screen.

"Here they come," he said grimly. "Shall I clear the guns?"

"Don't be silly." Arnold stared at the growing fleck of green and felt a load roll from his shoulders. "If they intended war, we'd be dead by now and Earth would be ashes." Relief grew within him so that his face split into a grin and his voice echoed his pleasure. "We've won, captain!"

"We have?"

"All along the line." Arnold saw by the other's expression that he did not know what he was talking about. "That ship is bringing back Jones and probably someone to talk out a treaty. In five years we'll have so altered the Klang way of life that they'll no longer represent a threat. In ten years we'll be partners. In twenty we'll be like brothers, maybe hating each other a little for part of the time, but never even considering wiping each other out."

"How nice." Winter stared dourly at the screen. "You know," he complained, "I can see everything you can see but, somehow, it doesn't tell me as much." Bewilderment exploded into irritation. "How do you know all that when they haven't even contacted us yet?"

"I know all that because they are coming up to contact us." Arnold took pity on the captain. "They demanded one man to represent us, right?"

"So we sent down Jones." Winter made no secret of his disgust. "A drummer with poetry for a hobby."

"The best for our purpose." Arnold stared at the screen, the ship was a long way off.

"The Klang are logical," he said. "That was our only real chance. If we had sent down a man like you, for example, what then? You would have boasted of our military strength but, remember, you wouldn't have been able to lie. So they would have known just how to gauge our strength. They would have destroyed or conquered us. We had to convince them that we were so strong that they wouldn't have a chance. And we had to do it according to their own rules."

"But Jones!"

"A man who has spent his life selling toys." Arnold smiled. "Have you known any boys who didn't at some time own a veritable arsenal of weapons?"

"Toy weapons, you mean?"

"A toy is a model of a thing," said Arnold. His smile grew wider as he looked at the screen.

"Take a culture devoted to military might. Have them meet another culture, one which, to them, is apparently illogical. The Klang cannot tolerate paradox, to them everything must have a reason, a logical reason. Then let them talk to a man who sells toys to children. What sort of

toys are in highest demand? Guns, pistols, swords, scaled down models of atomic cannon, guided missiles, spaceships, ray guns, tanks, a complete arsenal of weapons. If you were a Klangian, how would you fit that into a logical sequence?"

"Children's toys reflect their culture," said Winter slowly. "I read that once."

"True enough, but on Earth we do not worship the warrior, on Klang they do. Their children play with slide rules, go for body-building athletics, begin to train from their earliest days to become their ideal of what a warrior should be."

Arnold began to pace the control room. Only now, when it was over, did he appreciate the strain of the past few weeks. He had insisted that his plan be tried—he dared not think of what would have happened had it failed. On the basis of what he knew, the plan could not have failed.

"I would have loved to have been down there," he chuckled. "I can just imagine what they must have felt when Jones told them that he sold say, a thousand gross of spaceships a month, a hundred dozen gross of atomic cannon, five hundred gross of atomic bombs."

"But they were toys," protested Winter. "Not the real thing."

"Did they know that? More important, the Klang culture does not recognize make-believe. They asked Jones for the truth and we can assume they knew they would get it. But even if they did appreciate the fact that these toys are harmless, would it make any difference? What would you think of a culture which gave its children the most lethal weapons imaginable to play with? Wouldn't you think that, if they gave such things to children, what would they have tucked away?"

Winter began to chuckle. It developed into a laugh. He wiped his streaming eyes.

"I gave my grandson a fleet of spaceships last Christmas," he said. "Does that make him an automatic fleet captain?"

"Not to us, but the Klang are logical. They would think that the boy was trained for that position." Arnold beamed even wider. "Earth has about four thousand million population. Assuming that everyone of them had been given toys, models, to train them for adult life, how many space pilots, gunners, atomic engineers, all the rest of it would that give us?"

Winter didn't answer, he couldn't. He was laughing at the concept but, equally so, he was laughing because of relief from strain.

He sobered as he stared at the growing fleck on the screen.

"Poor guy," he said. "He must have had a tough time."

"For Jones?" Arnold shook his head. "He's not the one I feel sorry for. Klang gets my pity, they must be falling over backward to accept the fact that they are a back number. Jones had it easy. All he had to do was to tell the truth."

THE END

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BY P. SCHUYLER MILLER

SPOKESMEN FOR SPACE

NEARLY thirty years have gone by since Willy Ley earned his champion's belt as the world's prime spokesman for the dream of Space. He signed me and many another *auslands* member up in the Verein für Raumschiffahrt, the pre-Hitler German rocket society whose vision of the future was implicit in its name: the Society for Spaceship Travel. Through his articles, his books, his lectures—first in Germany, then in England and America—he kept this vision before the world, and with it the story of the great dreamers of the early days, who established its solid foundations in physics, engineering and astronomy.

Nobody can challenge Willy Ley as the historian of the drive into Space, but there is a friendly rival—

in the Shakespearean sense more than the modern—who by reaching a greater and more general audience, and by proclaiming the great dream more boldly, seems to be on the verge of demanding a title match. The contender, and perhaps the new champion, is Arthur C. Clarke.

Since early in 1953, Arthur Clarke's articles for *Holiday* magazine have been reaching more people, and more kinds of people, than any similar agency I know except TV. The magazine's sworn circulation in 1958 was 889,684, which means a total readership two or three times as great. What proportion of this two or three million monthly readers turns to Clarke's column, I have no way of knowing, but his once occasional articles have turned into a monthly column, and he is having his say in other magazines as well.

Nor does he pull his punches. Any reader of Astounding knows very well that Arthur Clarke's stories—like John Campbell's before him—have the disconcerting ability to surge off in two opposite directions: one series with the almost soberly documentary approach of "Prelude to Space" or "Sands of Mars" or the "Other Side of the Sky" sequence, the other with the lyric poetry of "Childhood's End" or "The City and the Stars." His articles have the same faculty of soaring from clear-eyed realism in their discussion of what now is, to pure vision in their persuasive preaching of the glories that may yet come. And while there are almost too many spokesmen for the here-and-now, there is no one else who is carrying our banner so far or so high as Arthur Clarke.

As evidence I offer Harper's new collection of his articles, from *Holiday, Harper's, Coronet, Saturday Review,* and many another equally dignified journal, as well as from more probable sources such as *Fantasy and Science Fiction* and the *Journal of the British Interplanetary Society,* which Clarke once headed. The book is published as "The Challenge of the Spaceship" (213 pp.; $3.50), and although the twenty articles it reprints involve a certain amount of repetition, it is an almost ideal collection for carrying the uninformed, uninterested layman painlessly to the farthest reaches of deep Space.

What happens when they find themselves there will depend on their own inner selves. Like a group of novices who have climbed some isolated peak, some will squat miserably, staring at the bare rock, munching their raisins, and waiting to be taken down again. Others will find that the universe has opened around them as never before, and as they look out over the expanse of peaks and valleys, high tarns and shredded waterfalls, reaching forests and waiting ice fields, they will also know that there can never be an end to Man's adventuring.

No man to leave his audience in doubt about where he stands, Clarke opens his book with a revision of a talk he gave to the British Inter-

planetary Society in 1946: "The Challenge of the Spaceship." In this chapter he sets most of the themes he will expand on in later essays. Then, gently and whimsically, he leads his untutored audience to the edge of Space with three articles written five years before Sputnik: "Vacation in Vacuum," in a satellite hotel, "Journey by Earthlight" across the surface of a colonized Moon, and "So You're Going to Mars?" advice for tourists of the coming century. And then he shows them why "The Planets Are Not Enough." "Sooner or later," this chapter ends, "we will come to the edge of the Solar System and will be looking out across the ultimate abyss. Then we must choose whether we reach the stars—or whether we wait until the stars reach us."

These are the chapters that most of you will read first, and maybe twice: "Where's Everybody?"—the races of distant Space who should be visiting us if the galaxy is peopled; "Across the Sea of Stars;" "Of Mind and Matter" with its final question, "Are we the chrysalis, the larva—or merely the unhatched egg?"; and especially the closing chapter, "Of Space and the Spirit." These are the chapters that shine with the vision of Space and Man's place in it—that earn Arthur Clarke his ribbon, or star, or unproclaimed Hugo as Spokesman of Space.

The book has its solid body of not-quite-simple astronomy too: a chapter on meteors and one on the Sun; one on "The Star of the Magi" that should have been paired with the author's memorable short story on the same theme, "The Star," others on the weather, on man-powered flight, and on the men whose names have been peppered over the map of the Moon. You'll get a glimpse of the strikingly different universe that radio "sees," and of up and down as a skindiver experiences them. Flying saucer believers will probably snort at "Things in the Sky," which describes a series of strange sightings that turned out to have natural explanations—that were, in fact, IFO's: Identified Flying Objects. And any Martians among you will nod sympathetically at your Archaeological Commission's "Report on Planet Three," which points out the improbability of intelligent life on this sodden, violent globe.

Not to be outdone, Harcourt, Brace has brought out a grand omnibus of Clarke's science fiction, "Across the Sea of Stars" (584 pp.; $3.95—and a bargain!). You get two complete novels, one in each of his styles: the imaginative "Childhood's End," with its sad yet hopeful vision of the destiny of Mankind, and the documentary "Earthlight," a melodrama of life on the Moon. And you get eighteen short stories from three previous books, "Expedition to Earth," the wryly delightful "Tales from the White Hart," and "Reach for Tomorrow." These lack only one or two stories from Clarke's last short-story collection, "The Other Side of the Sky," to include most of his best short fiction.

Arthur Clarke or Willy Ley or someone I have overlooked may be the West's most potent spokesman for Space, but the Russians hear other voices speaking. After the fiasco of last year's "Sputnik into Space" —the popularized, journalistic mass of generalities by one M. Vassiliev which barely survived double or triple translation into Italian, English and American, I've been a little wary about falling for more of the same. But in three books published during the past several months, the Russian space scientists have been given a chance to speak for themselves. I am not urging you to rush out and buy any of the three, although at least one probably belongs in a reference library on the drive for space.

That one is "Behind the Sputniks," edited by F. J. Krieger of the RAND Corporation, that rather unprecedented non-profit corporation that carries on long-range research projects—including, I'm told, one on psi —for the United States Air Force. It was published in this form, which is apparently a culling from the material prepared for the Air Force, by Public Affairs Press of Washington; you get three hundred eighty pages, thirty-nine papers, eight appendices, a bibliography, and a good index for $6.00.

Dr. Krieger's introduction is a compact review of Russian accomplishments in the development of rocketry and space-flight theory, that does full justice to the pioneering Tsiolkovskii and his neglected contemporaries and disciples. You'll find some of these names liberally tossed around in the other books, but you may have to come back to this paper of Krieger's to find out just what the men did.

Then, in seven sections, Russian scientists carry on the story, mainly in papers from their own technical journals. There is a short preliminary section on "Space Flight Comes of Age"—in which I would have liked to see some actual quotes from Tsiolkovskii—a fat one on now-familiar "Problems of Astronautics," a thorough discussion of "Biological Factors," and then a group of papers on proposed flights to the Moon, Mars and Venus. A short section on missiles and atomic propulsion is followed by a long one on problems and plans for the satellites, and the study closes with two *Tass* reports on Sputnik I.

You'll find some cracks at American science fiction, which K. P. Stanyukovich considers "political and adventure magazines"—he also attacks a New York *Times* story which foresaw the propaganda values of a Russian satellite as "irresponsible." I think you will find a suggestion for exploration of the surface of the Moon by a remotely controlled "tankette," deposited by an unmanned rocket, rather intersting, and the lucid discussion of the human and biological side of space flight by V. V. Rozenblat in "Before Flight into the Cosmos," and of relativity and its relationships to satellites in V. L. Ginzburg's Chapter 32, would be good in any anthology of science writing.

Citadel Press has attempted rather more and accomplished it not so well as RAND in the volume they call "Soviet Writings on Earth Satellites and Space Travel" (253 pp.; $3.95). No editor is listed, and there is internal evidence—as there was for the Vassiliev book—that the translation out of Russian has been done by someone with academic or journalistic background but little understanding of science. The selection may even have been Russian, since the copyright is in the name of "Am-Rus Literary and Music Agency."

This book attempts more than Krieger's selection, in that the RAND volume is clearly aimed at scientists or perhaps at military men with some scientific background, to make it quite clear that Russian advances in space science are no accident, but the result of a long evolution going back to Tsiolkovskii in 1903 and earlier. Citadel is publishing a book which tries to get the same message across to a general audience, and it does this by giving over the first half of the book to an excellent if condensed introductory statement by Ari Sternfeld—their spelling: the other books make it Shternfeld—who is both a rocket scientist and perhaps Russia's outstanding present-day "spokesman for Space." In fact, if the Soviet media have given Shternfeld a greater audience east of the Iron Curtain than Ley and Clarke have had in the West, perhaps he deserves the award I was passing around so freely in the first part of this discussion.

Shternfeld passes quickly through the now-familiar preliminaries of early rocket developments and Space-theory, and gets down to his specialty: consideration of the orbits that satellites and interplanetary craft must follow. The last half of the book then offers short, quite general papers by "name" scientists, plus press and radio releases, telling the story of the first three Russian satellites. The story is not carried far enough to say much about what the three satellites reported as to conditions in Space. Maybe this is classified information—the RAND book doesn't go far enough to have included it—or maybe the anonymous editor just wasn't interested.

Citadel has handicapped itself in producing a book for general consumption by using a ponderous, inept translation. This is no simple-to-solve problem—Dr. Krieger speaks gratefully of colleagues who helped remove "the deep Russian accent" from the RAND report—but Citadel certainly didn't solve it. My guess that a translator with academic background and negligible knowledge of science is based on such translations as "tore" for the mathematical form we normally call a "torus," and a boner that makes Shternfeld seem to claim that a Russian-type Mars rocket can travel at more than twice the speed of light. In the latter case, I can see some earnest soul with a Ph.D. in Russian racking his brain for the meaning of the author's "astronomical unit," then suddenly concluding that it must be a Sovietism for "light-

year." Fortunately a diagram, which hasn't been "translated," makes clear what Shternfeld meant.

The third book in my lot is Shternfeld's own, published by Basic Books as "Soviet Space Science" (360 pp.; $6.00). Willy Ley's concise foreword places the book in the context of Russian rocketry, and in an "Epilogue" he has described the third and fourth Russian satellites. The Russian edition of November, 1957 appeared before the United States satellites got into Space; this translation has been made for the Air Force. What it is would have been clearer if the original title—"Artificial Satellites"—had been kept.

This is not, as you might suppose, a Russian counterpart of Willy Ley's own "Rockets, Missiles and Space Travel." It devotes two chapters to the laws of motion of a satellite in the gravitational field of the Earth, one short one to the principles of rocket propulsion, and then settles down to a thorough account of what should probably be called the ballistics of space flight—evidently Shternfeld's specialty. I haven't seen this so thoroughly discussed in any book in English. Finally, four chapters go into problems of life in a satellite, what can be seen from and done on one, and scientific uses that can be made of satellites in various orbits.

Needless to say, military uses of satellites are mentioned only as fantasies of the aggressive, imperialist, downright nasty Americans. Shternfeld does little or no West-baiting, either in his book or his part of the Citadel compendium; that comes from certain of his colleagues, especially in the RAND volume. Drawings and diagrams in the three books seem adequate, but the halftones in the Shternfeld volume seem to have been photographed from the pages of the Russian edition, which were in many cases photographs of English or American publications, and the end result is pretty much a blur.

GIANTS FROM ETERNITY, by Manly Wade Wellman. Avalon Books, New York. 1959. 223 pp. $2.75.

When you realize that this originates in a one-shot novel in *Startling Stories* for July 1939—information courtesy of Day's "Index"—you will also realize that Avalon has dug deep for this one. This, I'm afraid, was a pot-boiler for the author even in '39, for he was doing much better then, and has gone right on carving out a foothold for himself as a serious novelist and fantast. The "essence of life," fallen from the stars, which converts a few grams of dust into fully clothed reconstructions of Pasteur, Darwin, Newton, Edison and Madame Curie, is presented with all the plausibility of a current monster movie, and the creeping red blight could be an ancestor of that raspberry-colored Glob that has been oozing across the drive-in screens.

Actually, the basic idea is a good one: which scientific "giants" of the past would you resurrect for help in combating an Earth-threatening men-

ace? Might make a program for your SF club some night when you're desperate. But I'm not sure the answer isn't "None," and I'm very sure that Darwin and Edison were lousy choices. Darwin's genius lay in organizing evidence—which he doesn't do here—and Edison was the type of inventor who simply tries everything until something works. Now Steinmetz was a man who might have been useful . . .

RECRUIT FOR ANDROMEDA, by Milton Lesser.

THE PLOT AGAINST EARTH, by Calvin M. Knox. Ace Books No. D-358. 117 + 138 pp. 35 cents.

This is one of Ace's very minor items. They don't credit the magazine sources, I'm not Norm Metcalf, I don't yet have the continuation to Day's "Index to the Science Fiction Magazines," and neither story is worth the trouble of getting out all my back magazines.

Milton Lesser's half of the double-book is the better of the two parts, or at least the more interesting. He sets up a nice situation, in which the young men of Earth—and at least one young woman, a Russian with a mind of her own—are drafted for service "Nowhere," in a rotation plan that never brings anyone home. Kit Temple, caught up by the plan, finds himself swept along by the dubious operations of a mysterious Mr. "Smith," who has been substituted for a young billionaire. He bounces from a staging station on Mars to a strange world and a strange game on the far fringes of the galaxy, where he contends in a series of dream-games with the Russian amazon, Sophie, for a prize that is not quite what it seems.

Calvin Knox's share, unfortunately, is another interstellar intrigue yarn that could have been fun but falls flat. Earth has burst into space and is admitted into grudging partnership with three other humanoid races, who are probably plotting to rub out the new rivals. Lloyd Catton, supposedly Earth's best investigator, becomes a member of the Interplanetary Commission on Crime. He has phenomenal success at running down peddlers of the dangerous hypno-jewels . . . escapes assassination . . . slogs through spacewreck . . . chases a villain across space to a chlorine planet . . . wins a duel . . . chases a dangerous cargo back. I'll swear that a teen-age hubcap operator could have tripped him up almost anywhere along the way. He doesn't detect anything: he waits for the stupid crooks to come hand him all the answers. In fact, that's the one unifying element in the story: aliens are schlemiels!

Or is it intended as a deep satire on our present-day diplomacy? A commentary on the kind of wooden-headed athletes we send to cope abroad? All spoiled, of course, by the bland assurance that if a Good Guy stands around long enough, the Bad Guys will run out of ammunition, kill each other off, and/or collapse

from the sheer exhaustion of trying to ruffle his hairpiece.

PROVIDENCE ISLAND, by Jacquetta Hawkes. Random House, New York. 1959. 239 pp. $3.50.

Here is another English scientist, an archaeologist, turning to science fiction for her first novel—though by no means her first book. Miss Hawkes has a sizable list of slim and fat volumes to her credit: archaeology, essays, poetry, and at least one play done with her husband, J. B. Priestley.

If not as smoothly turned a story as Fred Hoyle's, this has a much more ambitious theme: showing up the foibles and shortcomings of our own society by contrasting them with a "lost" race of noble savages. These particular refugees are the descendants of the Magdalenian folk who lived in Europe near the end of the last Ice Age, and who created the finest of the Old World's cave paintings and engravings. Only now their characteristic flints show up in an American airman's collection, from an obscure island in Melanesia.

Naturally an expedition goes to find out whether the flints are facts or fakes. It is a mixed batch: Professor Pennycuick, rebelling against the armchair to the extent of financing the expedition; John Lynd, Paleolithic specialist and stereotype of the all-business scientist; anthropologist Alice Cutter, who knows the region; and radio officer Sam Roberts, who picked up the odd tools in his travels.

They find Paradise Island, and find it a most peculiar place, shrouded in opportune fogs and haunted by strange reveries. They find that the Magdalenians are still there, living in the crater of a volcano in a deliberately frozen Stone Age society, adapted only slightly to the tropical instead of the glacial environment. But, since technology and the social order have not been permitted to change for twenty thousand years, the people of Uskadak have developed their psi powers tremendously. The fog around the island was laid down by their mental effort, and they had bemused all but Lynd during the first attempt to land, almost wrecking the expedition.

We meet these delightful primitives about halfway through the book, when the expedition discovers them, finds its way into the crater, and settles down to learn the language and work out the story of their origins. Lynd presently takes to the woods with a delightful damsel who shakes loose his concealed humanity. Professor Pennycuick finds himself enjoying life all over again. The others fit themselves, in their own ways, into the idyllic life of Uskadak. Whereupon a set of American villains appear—the discoverer of the Magdalenian tools, back with some superiors to blow up the island with a super-H-bomb. Our friends forget their own differences to help the Uskadakans rout the invaders by a

combination of skullduggery, hypnotism and native booze.

It's enjoyable, but mild. If Vercors' "You Shall Know Them" hadn't tackled the same theme so much more basically, a few years ago, the contrasts between the savage society and our own might seem sharper. As it is, the romantic adventure elements, characterization, utopian satire, and criticism of our H-bombing selves never quite fit together.

MIND OUT OF TIME, by Angela Tonks. Alfred A. Knopf, New York. 1959. 266 pp. $3.95.

Here is still another novel by an English writer—now living in Oregon, however—from outside the SF "family." I am sure that the author did not intend her book to be categorized: it is simply a novel dealing with telepathy, as it affects a man in whom the "wild" talent is discovered and developed.

Unlike as the two books are, I think the closest recent parallel is to Richard Matheson's fine "A Stir of Echoes." In both books it is the impact of the strange powers on their holder that is important, rather than the novelty of their existence or the working out of a plot to which they are necessary.

The *rapport* between the ruthless, amoral Carl Kramer and the rather colorless, well-meaning John Erikson appeared while they were both in a Nazi prison camp. During an entertainment in which parlor magic and a "mind-reading" act were intended to mask the preliminaries of an escape, Erikson, slated as a stooge, suddenly "saw" the watch at which Kramer was looking. He also saw, consciously, that a guard had spotted a cold draft from the concealed entrance of the escape tunnel, and in consequence was buried in solitary. Here there was time and a reason to develop the mental link between himself and Kramer, and that hard type used it to put over an escape at the expense of a weaker fellow prisoner.

Some years later, Kramer is back, involved in gun-running and other profitable promotions, and ready to use Erikson. This leads only to Erikson's dismissal from his War Office job, where he constitutes a telepathic leak—though not so useful a one as Kramer had hoped. Finally they are together in a Near Eastern sultanate, trying to use their ability to control others' actions and secure an oil concession—and now, finally, Erikson revolts against Kramer's double-dealing and strikes back.

As you can see, the opportunities for sensational melodrama are abundant, and in any routine science-fiction yarn this is how the story of Erikson's "mind out of time" would have had to be developed. Instead, Miss Tonks has built up the characters of Kramer and Erikson and the strange distortions in their relationship brought about by their telepathic connection, and by Kramer's determination to exploit it. It's not an outstanding book, but it is a good one.

THE FOURTH GALAXY READER, edited by Horace Gold. Doubleday & Co., Garden City, N. Y. 1959. 264 pp. $3.95.

This fifth volume that *Galaxy*'s editor has assembled from his magazine covers three years, 1956 through 1958. It has an overall light tone, probably intentionally, but as a result is also light in memorable stories of the kind that come out of that magazine as well as this with pleasant frequency.

In fact, I'd rate only one of the fifteen stories in the book as "serious" SF—Paul Flehr's "The Hated," which describes a technique whereby psychologists are trying to discharge the psychotic hates built up among members of a long, dreary expedition to Mars. There is, however, a group of stories which offer up problem yarns with a novel twist, of a kind that used to be quite typical of Astounding. Finn O'Donnevan, for example, asks what can be done with "The Gun without a Bang"—an ultimate weapon that just isn't recognized as a weapon by the critters against which it is used. Robert Sheckley, in "The Minimum Man," proposes that planets should be explored by accident-prones with the cards further loaded against them, so that the far worlds will be guaranteed safe for the schnooks who must live there. Arthur Sellings' "Blank Form" is a not-unsolvable puzzle: what is the real shape of an amnesiac extraterrestrial?

Jim Harmon bridges over from humorously written problem yarns to pure comedy with a psychiatric satire, "Name Your Symptom," in which we see a future in which nobody, but nobody has failed to be analyzed and fitted out with some gadget that will counteract his pet neurosis.

The rest is yaks, with a few good yoks. Right in the grand old *Unknown* vein is the opening story, Stephen Barr's "I Am a Nucleus." The badgered hero of the story is the nucleus for a disturbance of probability that soon has his college town in an uproar. The hero of Thomas N. Scortia's "The Bomb in the Bathtub" is also the nucleus of a potentially fatal disturbance, but the solution is quite different from Barr's. Fritz Leiber, in the mood of a "Take me to your washroom!" gag, asks "What's He Doing in There?"—"he" being a Martian visitor who just does not come out of the bathroom. Frederik Pohl's "Gentlest Unpeople" are Venusian spider-folk, who are quite ready to overlook murder by a jerk from Earth, but are resolute about violations of their code.

One of the best in the book for its mild inevitability is Michael Shaara's "Man of Distinction," who can find a notorious or illustrious ancestor for almost anyone. The same vein of irony is in Richard Wilson's "Kill Me with Kindness": the ET's who have captured the hero at last give him the mate of his dreams. We meet another kind of romantic, writing to Dorothy Dix VI, in L. J. Stecher, Jr.'s "Man in a Quandry"—another accident prone, like the feck-

less explorer of Sheckley's tale, who eventually finds himself completely regenerated by mechanized parts. And Avram Davidson is concerned with the regeneration and generation of machines—specifically, bicycles—in "Or All the Seas with Oysters."

Two tales remain. Margaret St. Clair's "Horrer Howce" is a gimmicked little yarn about the amusement park with real monsters. And J. T. McIntosh's "You Were Right, Joe," is about the least of the fifteen: a chain of incidents, arising from a problem in time travel.

THE STAR OF LIFE, by Edmond Hamilton. Dodd, Mead & Co., New York. 1959. 192 pp. $2.95

I don't think any writer has ever managed to put the vastness of galactic space and time into words as successfully as Edmond Hamilton did in his long series of stories for *Weird Tales,* back in the late '20s and '30s. Maybe it was because we were young then—I suspect the same stories wouldn't have quite the same grip today, when such things are no longer new—but they did a lot to create our generation of science-fiction fans, including those who have become today's leading writers.

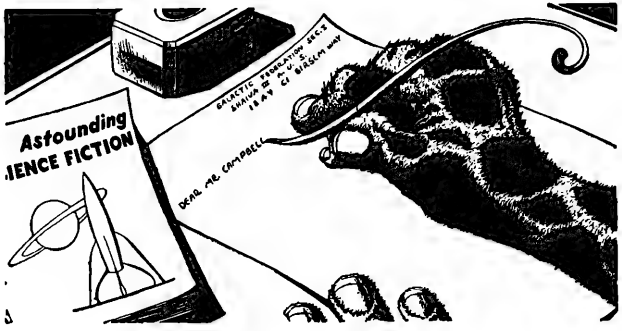
This book proves that Ed Hamilton can still write space opera with the best. The original magazine version was in *Startling* back in 1946, but it must have been thoroughly worked over to read as well as it does now.

The basic premise is, perhaps, still feeble enough to be pure 1946 space-opera. Kirk Hammond, aboard the first moon rocket, misses and heads out in orbit. Rather than die miserably, he opens his pod to space . . . then comes to after some thousand centuries, when his capsule again encounters Earth. He is rescued and held captive by the multi-racial, mortal Hoomen, who are trying to find the secret of immortality held by their galactic lords, the Vramen—and Hammond helps them make their way to the mystery star in the heart of the Triffid nebula, whose radiations hold the secret of life and whose one planet hides assorted other menaces.

It's pretty hard to see why the final "secret" couldn't have been spelled out or shown to Hooman leaders long before, but then I suppose there wouldn't have been a story. Every so often some of the old thrill works through, but Edmond Hamilton has written better books than this, and will again if someone will please put them between covers.

THE END

BRASS TACKS



Dear Mr. Campbell:

May I take this opportunity to thank Mr. John B. Long for his constructive criticisms of my work with the Symbolic Hieronymus Machine, Type III (September 1959 ASF)? I would now like to discuss each of his points in detail.

1. The results of my limited project with the Hieronymus Machine, appearing in the February 1959 Astounding, were not intended to be conclusive, although they were branded as "conclusions." I consider none of my results as absolute *proof* of anything; the data obtained are at best good *indications* of possibly existent phenomena.

2. Yes, suggestion could account for some types of responses which occurred; undoubtedly it has. But how can responses which appeared at always one and only one (the identical) dial point (sometimes only lasting for two or three degrees of rotation before or beyond the point) be explained in terms of merely suggestion?

3. The subjects were asked to report when and if they felt anything in or on the hand or in the sensor plate. This "tip" or "cue" or whatever was necessary. I had found that if I did not suggest this, subjects reported nothing until after the test, when I explained what it was all about. Then

the usual reply was: "Oh, yes, I remember that, but I thought it was just my imagination!" Then, upon retesting these people, some seemed positive. (This was determined by surreptitiously shorting the connections to the coil, stopping the dial rotation, shorting out a capacitor, et cetera—a common check-up I used.) Admittedly, this procedure is not the best, but it appeared the only practical method, since the tactile sensations were subtle, easily disregarded and check-up procedure was easy to perform.

4. Mr. Long, you made one absolutely incorrect statement. You seem to believe the Symbolic Machine is "run by electricity." No! No! That is the whole unbelievable point of the Hieronymus device: there is apparently no electricity involved in its operation. Therefore, chassis-vibration, hum, et cetera, do not enter the field of reference. And the aspect of the Machine which the subject observes is distinctly nonelectronic in appearance—a factor which may eliminate some likelihood of suggestion.

5. Agreed: anyone who puts his hand upon a table top and pays particular attention to his sensations is liable to experience tingling, vibrations, *et al.* But why do these sensations appear and disappear (why does the hand fall asleep?) only at particular Machine dial points?

6. You win the wager, Mr. Long: I did say "O.K." when subjects reported reactions (whether they were consistent in their selection of dial points or not). This bit of poor technique may be responsible for certain positive responses. But there were others in which the subject himself stopped a motor (not constant in RPM) when he felt a sensation. (And incidentally, I do not believe the vibrations of the tiny motor were transmitted through the masonite, plastic and hardwood bench; through a layer of paper and metal to the subject's hand.)

7. Results were about seventy-one per cent positive when all my subjects were considered in the several projects I carried on. (A great many of these persons were in the scientific fields and several were skeptics.)

8. I agree with Mr. Campbell that to include "non-sensation reports, or random-reaction reports" would not be proper.

9. Yes, I know the ohmeter skin-resistance meter is not an extremely accurate or significant indicator as used in the tests with Machine subjects. I eventually hope to try an EEG operated by a skilled technician.

10. In future experiments, I do hope to prevent the subjects from seeing even the Machine; the human operator should be hidden from view and preferably eliminated entirely.

11. Your suggestions regarding adequate statistical analysis and random starting points for the dial are to be followed in the future.

12. Dr. J. B. Rhine has already expressed interest in a project. I hope to do further work with the Hieronymus Machine shortly. Work which will, I trust, be more rigorously con-

trolled.—David M. Dressler, K6MLE, 14833 Valerio Street, Van Nuys, California.

Any other experimental reports from the field?

Dear Mr. Campbell:

One of the joys of life is seeing Authority confounded; but has Dr. Land's work really disproved the theories of color vision derived from Maxwell, or has it supplemented them?

Demonstrating that a dog can walk on three legs does not disprove that he is normally a quadruped; similarly, we may still have three-color vision even though we can limp along without it. Let's hope the experts don't realize this; it would be wonderful to watch them stampede.

As to the future of the new system in photography, I'd like to stick my neck out and predict serious limitations. For example, if you found a magenta (minus-green) apple and photographed it, against a normal background of leaves, et cetera., with narrow-cut green and red filters such as the Wrattens you yourself mention, I'll bet its projection would be seen (objectively and/or subjectively) as a fine biteable red. Whereas a three-color system will show its true color. All one needs to demonstrate this is an army of technicians and some magenta apples.

However, eyes and photography are two different things. It should be possible to divorce the investigation of color vision from photography, though I wouldn't want to suggest that to Dr. Land; and maybe his work will lead to exciting speculations about the nature of light itself. Is white light really a scrambled conglomerate, or is it a single frequency capable, under proper conditions, of arousing harmonics of various frequencies? Is yellow light really a combination of green and red, or some kind of a beat note, or statistical average?—C. M. Capps, 700 Church Street, San Francisco 14, California.

Can we make it a magenta plum, instead? Somehow red-violet apples are hard to find. And the darned thing would come out looking purple, I suspect. Look; I tried some violets. Now neither the red, nor the green filters pass violet at all. Therefore, clearly the violets had to appear black. But—they were correctly identified as violet, even when tastefully arrayed on a dinner plate so they looked just like spinach!

Dear Campbell:

Couldn't resist picking up your magazine; it's a drug.

As an artist, I would like to point out a fallacy in the conclusions of Dr. Land. He uses a red filter and a green filter. The red filter is basic. The green filter is composed of two basics. These are blue and yellow. He cannot get green without these two. What Dr. Land ends up with is a normal basic

spectrum of red, blue and yellow. What's new about this?

I challenge you or anyone else to get the color green without combining blue and yellow.

Land has not discovered anything new. He has merely found a new way of applying something old. This is valuable in itself; but a misunderstanding of the situation can lead to unnecessary confusion. — D. Bruce Berry, 921 Eastwood Avenue, Chicago 40, Illinois.

Sorry, friend, but you are indeed an artist, trained in art, not physics! Take a glass prism, and a beam of light; the spectrum so obtained contains a true, pure green that is NOT composed of blue or yellow. Wratten makes green filters that will not pass either blue or yellow light.

Dear Mr. Campbell:

I read with interest your comment entitled "Anybody Got An Explanation . . .?" on p. 113 of the August Astounding. Your feeling is that uv decontamination procedures applied to lunar and planetary probe vehicles are unnecessary, since the vehicle is exposed to the solar radiation field in transit.

A population of 10 to the twentieth power of the most radiation-resistant terrestrial microorganisms known will be reduced to one microorganism in less than a day if exposed to the unattenuated solar ultraviolet flux during quiet sun conditions. So you are right as long as your comment applies to organisms on the vehicle exterior.

However the point of the countdown decontamination procedures was to get at the *interior* of the probe, the parts not exposed to solar uv in transit. A hard impact on a low-gravity high-vacuum body such as the moon would distribute fragments from the probe interior over an appreciable fraction of the moon's surface area. A probe could easily contain enough microorganisms to distribute one over each square meter of the moon.

The lunar surface appears to be a semi-porous matrix of congealed dust particles. Consequently deposited microorganisms could easily lodge in interstices of the matrix, protected from solar radiation and from the lunar temperature extremes. Under these circumstances it would be very difficult to distinguish among the three possibilities: deposited terrestrial microorganisms, cosmobiota, and indigenous lunar organic matter or organism remnants, at a later stage in the exploration of the moon. It is for this reason that extreme caution is indicated in the initial phases of vehicle investigation of the solar system. The hard landing of a contaminated probe might irretrievably destroy unique evidence on the origin and evolution of life, and on the early history of the solar system.— Carl Sagan.

My comment applies to the interior, too, I believe. If the probe strikes the Moon, and is shattered across

several square miles, microorganisms inside the shell may be buried under lunar dust, and protected from Solar radiation; agreed. Most, however, will be destroyed by solar radiation, which is far more deadly than our uv lamps. Those shadowed from that radiation will be in high-vacuum conditions, at temperatures fluctuating over an enormous (from protoplasm's viewpoint) temperature range. The resultant total dehydration will not be mere loss of normal water, but will cause loss of intramolecular water, with resultant coagulation of the proteins. I'm not sure that sugar, under those conditions, wouldn't undergo loss of water in a caramelization reaction.

The result would leave any terrestrial organism as thoroughly denatured as our most intense uv illuminators could. Are there any organisms known to be capable of reviving after forty-eight hours in a hard vacuum at 20°C.?

Dear Mr. Campbell:

I rarely write letters to editors of publications but I have read so much in your magazine about ESP and psionics and various people's opinions on it that I feel impelled to write some word of protest.

There seem to be two schools of thought on the subject. For and against. One school vehemently denies the existence of any sort of ESP or any change in status quo. They even go to the extent of denying proven facts. They use the argument that any such talk is the work of the devil and therefore unholy. The other school of thought accepts ESP with a religious fervor and fanaticism. I believe, et cetera.

If one accepts the work of Rhine and others as the factual reporting of experiments performed by competent honest people, then there appear to be two (not one) alternatives. A. Postulate the existence of ESP, et cetera. B. Question the so-called Laws of Chance and Probability. We seem to accept these laws and rules with an unquestioning uninquisitive mind. Maybe they are not so good.

If one opens up the area to question one must also open up the Laws of Chance and Probability to question. Maybe we have ESP or maybe we are off on the wrong foot to start. Maybe there is a little of each.—Richard Morton, 350 South Shore Drive, Sarasota, Florida.

Let's try a third school: I don't know anything about "ESP," but some kind of odd events do happen. Leave out names, beliefs, et cetera and study!

THE END

(*Continued from page 9*)

studying for the last century or more.

Do you know what gravity is? No, friend—nobody does. You may be able to describe what it *does,* but you haven't the foggiest notion what it *is.* You're just precisely as ignorant of that as was Isaac Newton, some three centuries ago.

And as for inertia . . .! Newton had to invent the idea, and call it a force, and never did feel satisfied with it. Newton's Laws of Motion are extremely useful engineering approximations; the *cause* of the phenomena described by the Laws of Motion remains just as utterly blank as it was when Isaac had given up his efforts to understand the nature of the Universe, become Master of the Mint, and Sir Isaac.

We've grown up with the Laws of Motion so solidly planted that we can hardly appreciate that they remain absolutely unexplained. Einstein's efforts to get a little understanding didn't achieve much, actually; we still don't know what inertia is.

In E. E. Smith's Lensman series, he introduced the concept of "inertia neutralizers." Neat idea—and very highly original. Newton *assumed* that inertia was an inherent, a self-contained, property of matter. "Assumption unproven!" and Dr. Smith was calling attention to that fact.

There have been two articles in the wide-ranging pages of *The Scientific American* bearing on these problems. "Inertia," by Dennis Sciama, in the February, 1957 issue, and "The Weak Interactions," by S. B. Treiman, in the March, 1959 issue. Sciama's article in particular discusses the fact that our understanding of inertia is so minuscule that, in effect, we can't even talk about it intelligently! A primitive jungle savage, given a modern transistor radio receiver, could talk about what it *did* with reasonable cogency; we're about equally advanced in understanding inertia.

Man is not going to reach the planets by rocket. It's as completely and ridiculously impossible as it is to make plutonium from uranium by using cyclotrons.

I use that analogy knowingly; the first microscopic quantities of plutonium *were* made by cyclotron bombardment of uranium. It isn't physically impossible—it's just a violation of another fundamental law of the Universe. It's economically impossible.

Men can reach the planets by rockets in precisely the same sense that plutonium can be made by cyclotrons. The work being done with rockets today is exactly as valid and necessary and important as the work done with cyclotrons in the nuclear energy field. As vehicles, they're economically impossible; as research devices they are invaluable.

But the rocket is no more the way to the Space Age than the cyclotron was the way to build an atomic power plant.

If we want to make the next necessary step, we're going to have to

go back to Newton—and then go *behind* Newton, and find out something about the real nature of the ultrafeeble interactions. Gravity and Inertia.

My strong hunch is that the problem can't be studied with electronics or nuclear devices. Wrong tools. They're too powerful, and, in one sense, too feeble. The gravitational mass of those particles is too minute.

We're going to have to go way back to the earliest days of physics, to Galileo and even earlier. We're going to have to work with old-fashioned weights. Lumps of stuff. Centrifugal gadgets, and torsion balances.

Oh, maybe we can use electronic sensing devices—but only with the most extreme care. After all, the magnetic effect of a microampere flowing through a hair-fine wire is a potent force! Far greater than the gravitational effect of two one-ton steel balls a few feet apart. Oh . . . better make them lead balls; we couldn't possibly learn anything with magnetic material in the Earth's field! And come to think of it, maybe they'd better be silica masses; any conducting material on this planet today is bound to have all sorts of induced electrical currents flowing in it, producing God knows what effects, all of them probably greater than the ones we're trying to find!

Ultrafeeble forces aren't so easy to study. It isn't the "jewelry ore" kind of physics research, I'm afraid.

But there are some things that we've been taking for Laws of Nature that may turn out to be simply experimental error. The Law of Parity went glimmering, when the particle boys started working with weak-interaction forces.

Now take Newton's Third Law, for instance. "For every action, there is an equal and opposite reaction." An electronics engineer would say that "you're talking about a one hundred per cent negative-feedback circuit—and a one hundred per cent negative-feedback circuit is logically impossible. There has to be *some* unbalanced signal getting through in order to excite the canceling feedback signal."

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Law of Conservation of Momentum is exactly the same as the proof of the Law of Parity. "Well—nobody's ever broken it, have they?"

As of right now, I'm not so sure as I was last week. I've seen some pictures of a gadget. The above thoughts came out of my consideration of the contraption.

By all the physics I ever learned, it's nonsense . . . only looking at it, talking to the man who'd built it, made me realize that all the physics I'd ever learned started with Newton's unproven assumptions. Demonstrated, yes; proven . . . never.

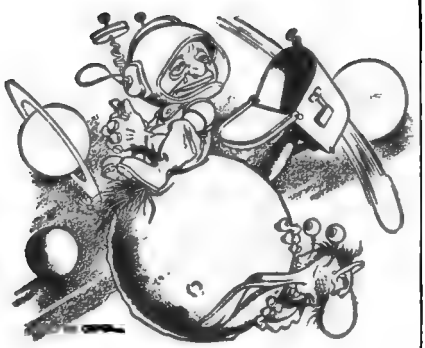
Up to 1945 it had never been proven that it was invariably safe to bring any two pieces of metal into contact—but everybody knew it was, because the principle had been demonstrated repeatedly for ages. Then, in 1945, somebody brought two simple pieces of metal into contact and proved for all time that it was *not* invariably safe to bring simple pieces of metal into contact.

Now, of course, we know that there are some pieces of metal which are so dangerous that you can't even walk between them! (Two subcritical masses of plutonium, placed 2.5 feet apart, can become hypercritical if a neutron-slowing moderator is placed between them. Water is an excellent moderator. You try walking between them, and you trigger them into a lovely blue-white glow of intense ionization.)

The gadget I haven't seen myself —only photographs. It's a contraption of rotating eccentric weights, solenoids and clutches and a one-quarter-inch electric drill for motive power. But cockeyed as it looked, the sight of the darned thing hanging a couple inches in the air and trying to climb without any external reaction . . .

Maybe it doesn't actually work. But just seeing it does make you feel that *"this,* not the rocket, is the way we must go!"

It's a very poor demonstration, of course. Since it's only a small model, it doesn't have an auto-pilot built in; since it doesn't have an external reaction (as I say, it appears to require that the Third Law be modified somehow!) it is necessarily inherently unstable, so it doesn't "hover in mid-



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air" very well. Once free of the supporting table, the unbalanced force it generates simply exerts itself along the long axis of the gadget—with no preference as to how that axis is oriented.

But I've seen some calculations on it. Neglecting ordinary bearing and gear-train friction, a twenty-five horsepower engine would be able to supply a moderate net upward acceleration to a three thousand pound vehicle. After the first couple of minutes the net outward acceleration would increase steadily as the downward force of Earth's gravity weakened. With a one hundred fifty horsepower engine, a net upward acceleration of one g at Earth's surface would be available. A two-g acceleration cannot be maintained very long within the limits of the Solar System, of course.

The calculations, incidentally, were not made by the inventor; they were made by a firm of professional consulting engineers.

As of just now, I'm not sure whether I've seen the first true space-drive or not.

But I am quite sure I've seen the direction in which we must look for the true space-drive.

It's not in rockets. It's in weights —masses—inertia—gravity. In the ultrafeeble—but ultra long-range, and accumulative interactions.

When, as and if I get more, and more solid, information on that gadget, I'll report. The inventor is, of course, having considerable trouble with the authorities in the field of space-flight. Their present orientation is, after all, rather heavily based on that Third Law, as applied in rockets. Maybe he's found an escape clause in the law . . . and maybe he hasn't.

But the true space-drive will not come from either electronics, nucleonics, or particle-physics.

It will come from understanding the ultrafeeble interactions.

From studying those slow, almost negligible . . . but cumlative! . . . ultrafeeble interactions that, after the ninety second fury of the bellowing rocket rising toward space . . . slowly, over tens of thousands of miles and days of time, bring it to a halt and drag it inexorably downward again.

THE EDITOR.

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IN TIMES TO COME

Next month starts our thirtieth year of publication—with twenty-six of those years under the Street & Smith management. It's going to be an active year for us—there are changes in the works! The change this next month will be the addition of sixteen pages of coated (slick) paper, with straight science articles. Next month's article will be one that might be considered a sort of "lazy editor's article"—it's the straight, as-sent-out-by-Argonne Labs news-release on Argonne's new plutonium metal fabrication setup.

Plutonium as a nuclear fuel, or nuclear explosive, we have a certain understanding for. But plutonium metal as a problem for the machinist—for the stock department . . ? How do you machine one-and-one-half-inch thick plutonium bar-stock? Or how do you store the said bar-stock . when it simply *must* not, under any conceivable circumstances, be allowed to get together, *or else!*

And next issue starts a new Harry Harrison serial, "Deathworld. Somewhere in the galaxy there is the galaxy's most rugged, vicious, violent, and dangerous planet, with the galaxy's deadliest, nastiest most lethal life-forms. By definition, one world must be the worst. "Deathworld" was it.

THE EDITOR.

THE ANALYTICAL LABORATORY

Some of you readers might be interested in the question that was tested-by-experiment, so to speak, this time: To what extent could an organized voting group, all sending in votes, influence the result of the An Lab?

A club-group sent in their votes separately, but all voting alike. The net effect was a change in the third significant digit in the first-place story, a two-unit change in the third digit in the second-place vote, and a maximum of a one-figure change in the second figure of the fourth-place story.

Reason for the no-significant-effect; the club did, in fact, vote in practically the same way that the reader group generally voted. And, understandably, no community club represents any large percentage of the national "club" of ASF readers.

The final results for the September 1959 issue:

PLACE	STORY	AUTHOR	POINTS
1.	That Sweet Little Old Lady (Pt. 1)	Mark Phillips	1.86
2.	. . Or Your Money Back	David Gordon	2.51
3.	A Matter of Importance	Murray Leinster	2.80
4.	The Sound of Breaking Glass	Algis Budrys	3.87
5.	On Handling the Data	M. I. Mayfield	4.44

THE EDITOR.

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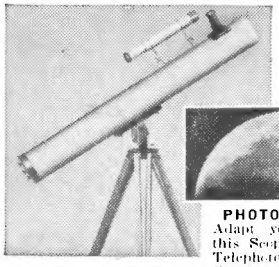

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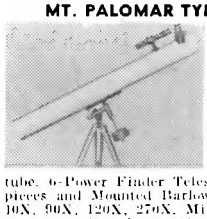

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